

SKIN DIVER

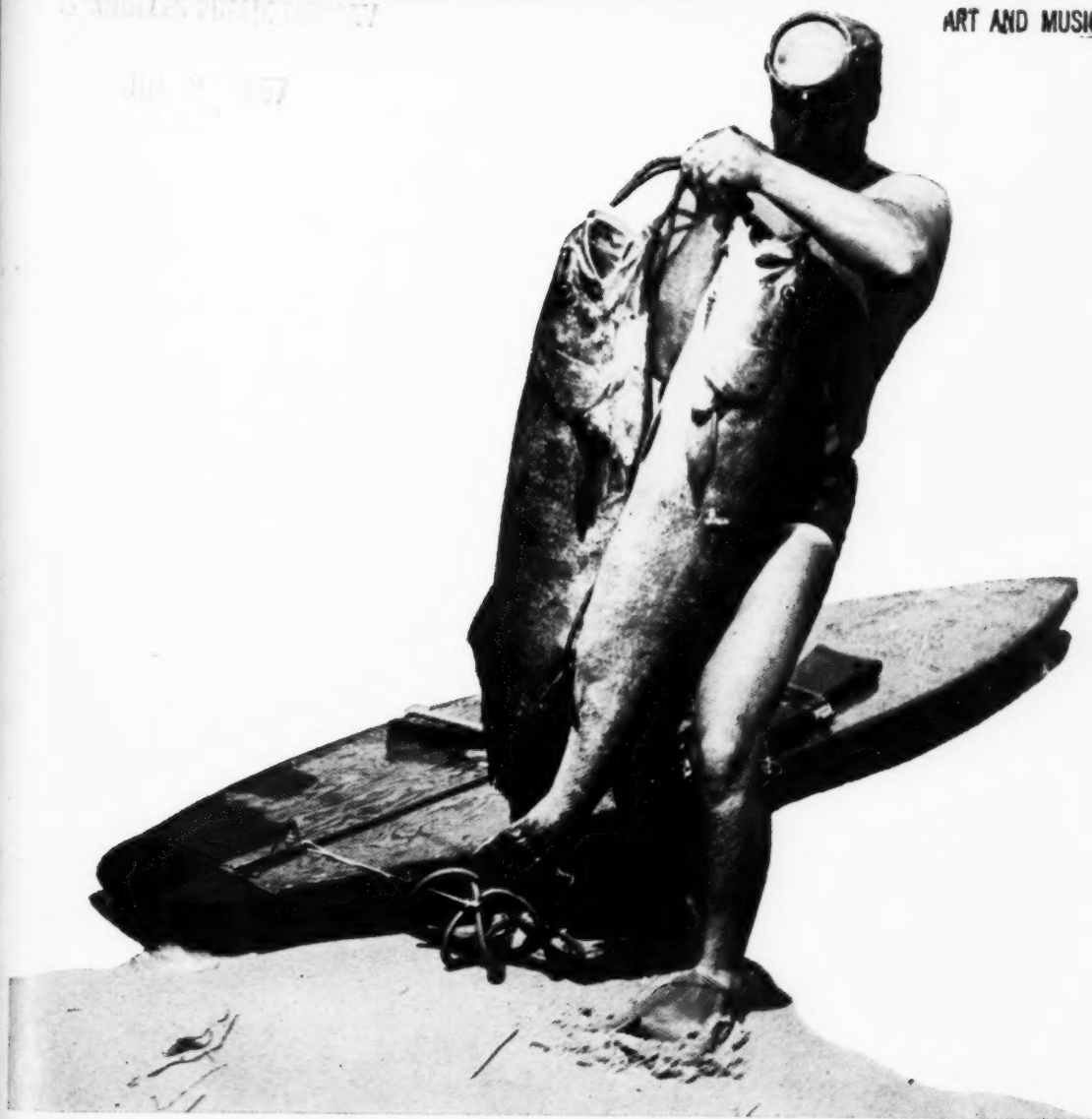
DEVOTED TO THE UNDERWATER WORLD

JULY 1957 35c

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JUL 27 1957

ART AND MUSIC



This month

BODY RECOVERY
AT 210 FEET

UNDERWATER SPEARFISHING
LAWS AND REGULATIONS

Healthways "FIRST IN WATER SPORTS!"

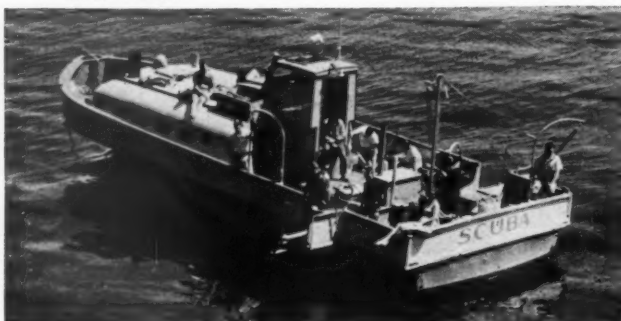
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SKIN DIVER MAGAZINE

Devoted to the Underwater World

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Volume VI
Number 7
July 1957

Dates & Places

SOUTHERN PACIFIC A.A.U. MEETINGS: All business meetings of the S.P.A.A.U. are held the first Wednesday of each month at Roosevelt Park, 7600 Graham Avenue, Los Angeles, California.

1957 EAST COAST COMPETITION SKIN DIVING ELIMINATIONS AND CHAMPIONSHIPS: clubs, contact the sponsor in your area for applications, locations, etc. Eliminations will be held on July 7, 1957.

MAINE THROUGH MASSACHUSETTS: Northeast Council of Skin Diving Clubs, P. O. Box 42, Shawsheen Village, Mass.

RHODE ISLAND: Rhode Island Council of Diving Clubs, c/o J. Mulholland, 66 Ashmont Street, Providence, R.I.

CONNECTICUT: Conn. Council of Diving Clubs, c/o Jack Shaugnessy, 16 Beverly Place, Norwalk, Conn.

NEW YORK AND NORTHERN NEW JERSEY: Empire State Underwater Council, P. O. Box 165, Flushing, New York.

SOUTHERN NEW JERSEY THROUGH THE CAROLINAS: Middle Atlantic Underwater Council, c/o Harold Taylor, 317 Cleveland Ave., McDaniel Crescent, Wilmington, Delaware.

EAST COAST CHAMPIONSHIPS: July 21, 1957 . . . sponsored by the Empire State Underwater Council, P. O. Box 165, Flushing, N.Y.

S.P.A.A.U. ELIMINATIONS: June 23, Salt Creek area, South Laguna, Calif.

S.P.A.A.U. FINALS: July 7, Scotchman's Cove area, North Laguna Beach, Calif.

PACIFIC COAST CHAMPIONSHIPS: July 21, Divers Cove, Laguna Beach, Calif.

CENTRAL CALIFORNIA CHAMPIONSHIPS: July 14, 11 A.M. to 9 P.M., Carmel Beach, California. Registration at American Legion Hall, 8th and Dolores, Carmel, 8-10 A.M.

WOMEN'S UNDERWATER SPEARFISHING CHAMPIONSHIPS: July 21, Divers Cove, Laguna Beach, Calif. To be held at same time as Pacific Coast Championships.

NATIONAL CHAMPIONSHIPS: August 4, 1957, Catalina Island, California. Teams competing will be from all over the United States.

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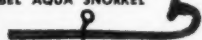
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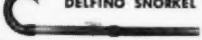
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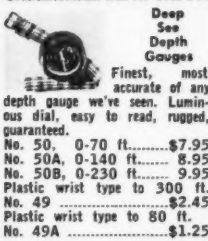
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No. 106 The Silent World by Capt. Cousteau\$4.75

No. 28 Free Diving by Dimitri Rebikoff. Rebikoff's latest work on all phases of skin diving. \$5.00

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SKIN DIVER—July, 1957

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LETTERS

... In the March 1957 issue of your magazine, you kindly publicized the activation of an engineer diving detachment as an Army Reserve unit at this training center. The unit has been activated and started training at San Pedro Harbor and Fort MacArthur.

You will be interested to know that we have received inquiries concerning the unit from all over the states, one from England, one from South America and one from Mexico.

Thank you for your kindness in printing the article and for the copies of your fine magazine.

Sincerely,

James J. Finn
Lt. Col., C.E.
Senior Unit Adviser

... Just a line to renew my subscription for another year. We would like to hear from other divers in this area. My brother and I both have equipment for diving in any weather. Would like very much to find some more diving buddies. Keep up the good work in the magazine. We both think it is the best in the under water world.

William Opsha
1015 West Park
Taylorville, Illinois

... According to the law of the State of Connecticut and other States, underwater spearfishing in fresh water is prohibited. I feel that this law is outdated and unnecessary and I am seeking help from other spearfishermen who feel the same way I do to help get rid of this law. If we get a reasonable amount of support I believe we can have the law changed. I would be glad to receive letters from your readers who may feel as I do and wish to help in this situation.

Jay Cumming
Ledgemoor Lane
Westport, Conn.

... In the May issue I saw where the California Council is worried about how to dispose of the starfish collected in a proposed "Star-Mop". I am a biology major at Villanova University and, according to our textbooks, starfish are good for fertilizer and are also used in biological research. I also think that the Council could sell these echinoderms to some of the biological supply houses, or even to high schools, colleges and universities.

Edward H. Dyer III

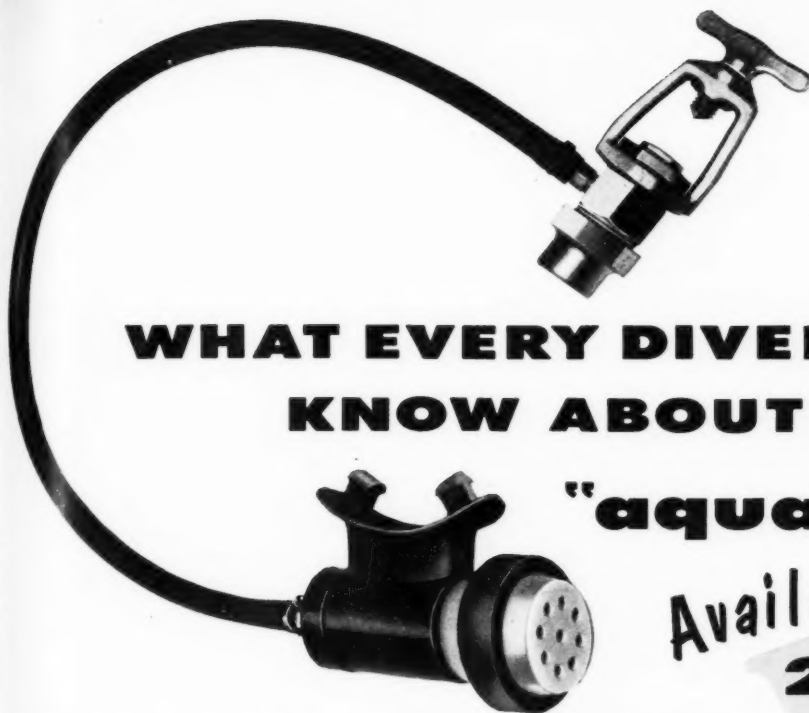
... I have just received my first copy of "Skin Diver" and would like to find out if you could possibly publish my letter as I would like to communicate with divers from anywhere in the world. Thanks.

Ian Porter (17)
14 Philomel Crescent
Bayswater, Auckland, New Zealand

... I believe that you have quite a few women readers of your magazine, along with the thousands of men, and therefore, with the help of "Skin Diver" Magazine, I would like to start an "All-Girl" Skin Diving Club here on the East Coast.

I have been in search of women skin divers in this area since last year, and as yet have found nary a one. I would appreciate it if you would publish a part of my letter in one of your magazine's columns, and in this way

(More Letters on Page 8)



WHAT EVERY DIVER SHOULD KNOW ABOUT THE NEW

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3 The Aqua-Matic can be used with any standard Tank Block or Valve combination.

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5 The Aqua-Matic features a built-in automatic reserve. When breathing becomes difficult the diver must start his ascent. As the diver ascends the reserve provides sufficient air for a safe unhurried rise to the surface with normal breathing.

6 Constructed of stainless steel, chromed brass, hard-grade nylon and neoprene with a flexible high pressure hose, non-corrosive and impervious to oil, salt water, sun, etc.

7 The diaphragm is constructed in the mouthpiece assembly with built-in exhaling valve which releases exhaled air bubbles at side of face to prevent impairment of diver's vision. This exhaling valve also serves as a non-return valve, making the mouthpiece easy to "clear."

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LETTERS

I hope to be able to bring the female skin divers out of hiding. If any woman or girl is interested in joining such a club, they should get in contact with me. As I mentioned before, the club is just in the planning stage at present, and no definite ideas exist as yet.

I would also like to correspond with other skin divers, both male and female. I hope it is possible for you to print this letter in your next issue. Again, I would like to thank you —and keep up the good work.

Patricia Smith
90-37 160th Street
Jamaica 32, New York

... I have noticed how some fishermen were dead set against skin divers so I suggested to our club members that we help the fishermen as much as possible. This is what we have done. We cleaned the beach area of all cans, bottles and other rubbish; we disposed of it by burying it in six big holes we dug. We then chopped down several old trees and sank them where they would provide cover for the fish and we then informed the fishermen the whereabouts of the fish hang-outs. As of this date the rod fishermen at our favorite diving hole hold the skin diving clan in high esteem and we have a nicer place to dive.

Daniel C. Wagner, "Scubateers"
Hazelcrest, Illinois

... Dennis Vaught ... This is in reply to your enquiry forwarded to us by "Skin Diver" Magazine, concerning the increase in sharks in the Gulf of Mexico. The statement, "that the number of sharks in the Gulf of Mexico increases at the rate of 1,000,000 each day" is undoubtedly not true.

There is some balance between the number of sharks that are reproduced each year and those that die each year. Do not concern yourself about the possibility of being crowded out of the sea by sharks.—James F. Muddock, Marine Laboratory, University of Miami.

... I thought you might be interested in having a first hand report on these Islands.

The Cayman Islands, located South of Cuba and only 180 miles N.W. of Jamaica, offer some of the finest diving areas in the World. Only two hours from Miami via LACSA Airlines, a subsidiary of Pan American, has two flights a week serving these Islands.

These waters are so clear that you feel like you are suspended in air and your snorkle is acting as a "Skyhook." You can see the weight on the end of a lead line hit bottom at 200 feet. Huge canyons and every conceivable type of coral is abundant here, as are fish, turtle and lobster. The collector of Marine Tropicals will find this a Paradise.

Diving Headquarters here is Jim Ford's Cayman Yacht Club with Tom Hubbell in charge of diving operations, and rental gear and compressed air is available.

My 15 year old daughter Janna and myself are staying at the Roulstones "Seaview Lodge" where clean airy rooms facing the sea and three wonderful meals included are to be had for as little as \$5.00 per day. This morning I had an Islander Breakfast of Broiled Snapper with fried banana and bread-fruit, fresh papaya with lime juice and coffee. There is also a pool for those who do not want to go in the ocean. While having breakfast you are likely to see parrots or canaries, both native to the Island flying outside the

Central California Regional Championships

By ZI DYER

The Central California Competitive Skin Diving Championships committee announces that the Cen-Cal regional Championships will be held on July 14, 1957, at Carmel beach, Carmel, California. Registration and briefing of the teams will take place at the American Legion Hall, Eighth & Dolores, Carmel, between the hours of 8:00 and 10:00 A.M. The registration fee will be three (3) dollars per persons or nine (9) dollars per three man team.

All contestants must be at least sixteen years old and all those under twenty-one must bring a consent slip signed by their parent or guardian. No one under twenty-one will be allowed to register without a signed consent slip.

The regional contest, sponsored by the Monterey Peninsula Chamber of Commerce, the Central California Council of Diving Clubs, and various sporting goods stores in Central California will be held between the hours of 11:00 and 3:00 P.M. ➤

screened in dining patio.

Orchids and Easter lilies grow wild on these Islands.

Lew Maxwell
"Florida Frogman"

... I notice in the "Skin Diver" that you would like to know how to dispose of starfish and in another department that you would like marine specimens for the office. I am sending a six legged starfish which is the only one I have noticed. Perhaps not so rare, but a little different. Under the disposal department, try stuffing the starfish into a hub cap of a car belonging to some one you don't like. We tried it with a couple of mackerel and the fellow finally sold the car because it smelled. I would like to know how to preserve starfish like some of the beautiful specimens I've seen all puffed up and pretty. Do you know of a formula, recipe or method for preserving them perfectly?

Lee Hersey
62 Bridge Street
Beverly, Mass.

(Parts of this letter belong in the "Driftwood" column. Thanks for the many-legged starfish.)

... Like the cover of "Skin Diver" we have some big barracuda here in Bermuda but we seldom have any trouble with them. The skin diving is wonderful over here. You couldn't ask for better. All along the reefs of Bermuda there are thousands of all different types of fish and any size you care to go after. The largest one I have speared weighed 172 pounds (a parrot fish). I am just now starting underwater photography and there are many beautiful scenes around the island. I am stationed here during my tour with the Coast Guard.

James D. Dailey

SKIN DIVER—July, 1957

CHOOSE A NORTHILL AIR-LUNG!

COMPARE
THESE
4
FACTS.....



*"Breathes
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Breeze"*

The Northill Air-Lung... by
any comparison, the finest
SCUBA in the world! See
your dealer for a demonstration.

① COMPARE SAFETY FEATURES!

The Northill Air-Lung's regulator is fail-safe. Its design insures a continuous flow of air to the underwater swimmer even if the metering valve should fail. Its air-reserve feature gives the swimmer a minimum of 300 psi regardless of depth.

② COMPARE EASE OF MAINTENANCE!

In contrast to less-scientifically designed SCUBAs, the Northill Air-Lung's simplicity allows it to be completely cleaned and reassembled in 10 minutes... with only a screwdriver! No calibration is necessary.

③ COMPARE DURABILITY!

Only the Northill Air-Lung gives you a regulator valve machined from solid brass with a built-in depth compensated reserve air valve. Its neoprene hose is salt-water and sun resistant. Its quality craftsmanship insures trouble-free performance.

④ COMPARE EASE OF BREATHING!

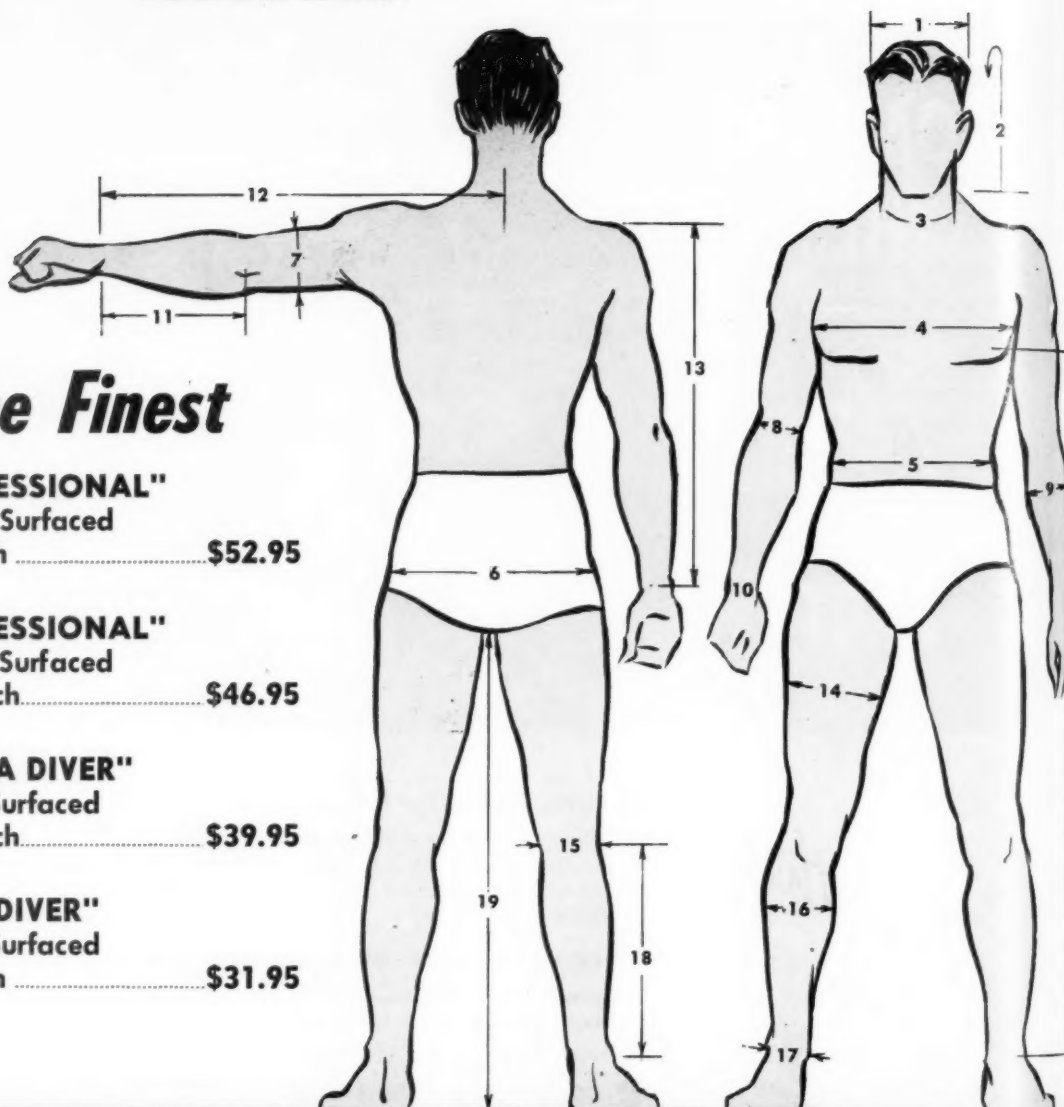
The Northill Air-Lung has the lowest breathing resistance in the SCUBA field... at all depths and in any position of the swimmer's body. This greatly increases diving enjoyment... cuts down fatigue.



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2. BACK NECK TO FOREHEAD
3. NECK
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5. WAIST
6. BUTTOCKS
7. BICEP

8. ELBOW
9. FOREARM
10. WRIST
11. ELBOW TO WRIST
12. WRIST TO MID BACK
13. SHOULDER TO BUTTOCKS
14. THIGH

15. KNEE
16. CALF
17. ANKLE
18. ANKLE TO KNEE
19. ANKLE TO CROTCH
20. ANKLE TO PECTORAL
21. HEIGHT
22. WEIGHT

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When Voit offers swim equipment for the skin diver, you can be sure you're in the picture. Each item of Voit diving equipment has been tested and proved by expert divers like yourself. For example:

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Featuring the most respected name in SCUBA—the world-famous Cousteau-Gagnan process. Built to deliver proven, safe, competent operation, in a variety of models. Component parts—regulator, tanks and valve assemblies—may be purchased separately or in combination.



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Superb styling, unmatched comfort and fit. Extra-length curved fin. Two-tone royal blue with stiff propelling surface and soft, molded full foot-pocket.

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GREAT HALL OF NIGHT

By JIM DUGAN

Louis Malle and Jacques-Yves Cousteau, makers of *The Silent World*, have produced a short film on cave-diving, about to open in Europe. It will be seen here later this year. The picture recounts an expedition into the Fountain of Vaucluse, near Avignon, by the largest wet cave expedition yet mounted, which attained the furthest subterranean water depths that have been reached. One sequence was made at a mean depth of 270 feet, about 450 feet through the slanting shaft from the diving float.

The Fountain has been forced by divers three times since 1878, when the helmet man, Ottenelli, reached 75 feet. Cousteau and Frédéric Dumas and other members of the French Navy Undersea Research Group attained the region of 200 feet in nearly fatal dives in 1947. The objective is the puzzling geological mechanism which spouts a furious flood from the placid spring in March. It has been observed annually since records began five centuries ago.

The Third Vaucluse Expedition in August 1955, reported here, was that of the Office Francais de Recherches Scus-Marine (O.F.R.S.) of Marseille, or French Undersea Research Center, a technical group in support of Cousteau's expeditions. He was not on this job, which was carried out by young associates, André Laban, O.F.R.S. director; diving master Yves Girault; electrical engineer Pierre Chignard; chief geologist Jean Svirine; submarine cinematographer Malle, and eleven divers aided by Dumas. Technical preparation began eight months before diving. Four truckloads of special gear were packed up mountain trails to the spring, including boiler floats for the diving platform, an electrical control panel, floodlights and sound equipment. A special power line was strung into the fountain from the village of Vaucluse, where the compressor and storage bottles were located. Volunteers carried the empty Aqua-Lungs down the trails and returned with full ones.

An electric flarepath was installed to a depth of 155 feet in the spring. Below that point the divers carried 200-watt searchlights with lighthouse lenses. A submerged loud speaker and hydrophone was rigged for communication

with the surface. The two-man teams used surveying equipment to chart the fountain. As they surfaced the measurements were carried over into a three dimensional clay model by Svirine. The water temperature was 55° F. The operation went on for two weeks. More than a hundred individual dives were logged.

In the following notes actual depths are given, not the greater distances along the 45° axis of the shaft.

Raymond Kientzy and Armand Davso discovered a hitherto unsuspected gallery opening off the south wall 180 feet down. A noticeable current was flowing into the large triangular opening. They swam inside and found a tunnel about 25 feet wide, sloping down at a fifteen degree gradient. They proceeded 150 feet into the branching shaft without finding a break in the walls. Since the current was against them for the return, they felt it prudent to turn back from this point, 220 feet down, more than 400 feet from the float. They named their discovery, the Prado. At this depth the main shaft was about a hundred feet in diameter. Detailed exploration of the circumference revealed two more openings in the west wall. They were scarcely large enough to admit a man and a stiff current was drawn into them. One of the divers got fifteen feet into one of these fissures.

Two hundred and twelve feet down the main shaft turned up into a huge vault, which was explored around the top. Snap dives with the lighthouses brought vague sights of heavy boulders on what seemed to be a level floor to the big room. No further openings were sighted, but the survey was not complete, due to heavy danger of nitrogen narcosis. Malle obtained one film sequence at about 270 feet. The penultimate dive took seven divers into the chamber for a sequence at 247 feet. The O.F.R.S. named the place, *La Grande Salle des Ténébres*. The latter word means darkness, gloom, night, mystery and obscurity.

The expedition did not solve the mechanism of the March eruption, although the survey results may give hydrologists better-informed clues on the system. The main import of the O.F.R.S. effort was its contribution to wet caving techniques. Powerful cables were put down without danger of freshwater electrocution should the current have leaked out. The plant included a loud speaker on the surface to control sightseers. The divers extended compressed air to its deepest working limit. Equipment and research was furnished by several engineering firms and the Marseille Chamber of Commerce. The commune of Vaucluse lent volunteers to establish and maintain the base camp.

Jack Crevalle with Bennett Winston, Endurance Team Captain and AQUA-LUNG unit used in dive.



A NEW WORLD'S RECORD!!

Jack Crevalle, a former U. S. Navy U.D.T. diver, sponsored by the Miami Makos Skin Diving Club, used the "AQUA-LUNG" exclusively in setting an officially timed world's record by remaining submerged for a period of 28 hours and 53 minutes at the Miami Seaquarium on May 11-12, 1957. Jack says: "The AQUA-LUNG performed perfectly with no effort on my part at all times during the dive."

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That's right. You helped to build the new Voit Sea Hawk Fin. Your ideas and suggestions have been built into the first really new swim fin to come on the market in more than a decade.

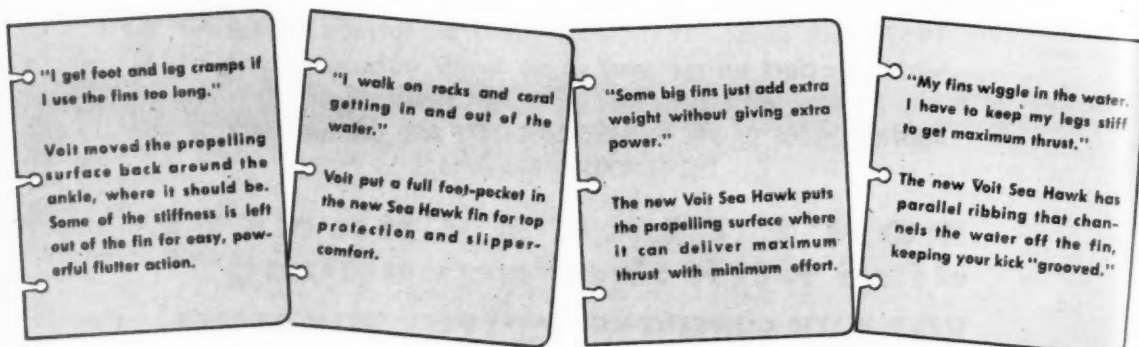
Here's the way it worked.

During the past few years, Voit has asked hundreds of expert skin divers the same questions...

"What do you like about your present fins?"

"What don't you like?"

Let's look at a few...



The curved shape and modern design of the new *two-tone royal blue* Voit Sea Hawk fins combine top styling with top performance—maximum thrust with minimum effort!

The new Sea Hawk fin has the Voit name, of course, but we're not ashamed to say... **YOU BUILT IT...**

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A tribute:

GORDON LUMLEY

By RON WRIGHT

On the 12th of May in twelve feet of water on the grubby bottom of Durban bay died Gordon Lumley, sometime president and founder-member of the Durban Undersea Club, founded and editor of the South African 'Fin Diver'.

32 years old, his passing has shocked all who knew him and his death will have a profound effect on diving with equipment and on the leadership of clubs in this country generally.

Married but a few years, Gordon leaves bereft Daphne and her three months old daughter who sat together on the wharf-side during the last dive. He was a spearfisherman plus,—not just once has his photograph appeared in the 'Skin Diver' with a forty pound or more Garrick or Barracuda or King-fish. He took the trophy for equipment diving in the first South African diving reliability trials. He organized those trials . . . those reliability trials were his idea in the first place and divers from all over the Union came to Durban to take part.

Stocky-built Gordon will be remembered as he walked up the beach with his hair all over the place and the deep mark left by his mask on his face; that special wooden gun of his in his hand and a couple of ten-pound fish hanging on his belt . . . he will be remembered smart in maroon tie and blazer on club nights up there on that old familiar eighth floor clubroom.

The sea meant much to him, not only shooting fish the bigger the better, but he also had built himself a salt water

Gordon Lumley



aquarium which he was stocking up with all sorts of little fish; it was for this home fish tank that he needed a couple of fire-fish, you probably know the sort I mean, they are also called lion fish—the kind that are bright red with black marks and have long fins like wings, and if you touch them it means a week in a hospital; anyway this bright Sunday off he went with the family to the base to catch one or two . . . on with the gear and in.

That more or less is the end of the story . . . for Gordon it is anyhow. Gordon was wearing a home made regenerative self-contained oxygen closed circuit gear which he had used several times previously. When found on the bottom after a very brief search, the mouth-piece was not in his mouth, his mask had no more than a few drops of water in it, the post-mortem showed no indications other than those of drowning, the blood which showed when artificial respiration was applied is apparently not unusual in drowning cases, there was still 70 psi pressure in the oxygen bottle but of course, the gear was flooded.

Anxious to determine the cause of the tragedy, the police had the gear checked by one of our leading divers,

Geoff Smith; Geoff dried out the gear, filled the cannisters with new soda-lime and went in under control conditions, running a CO₂ test at the same time; after the best part of an hour he surfaced, quite satisfied that the equipment was satisfactory. On the surface he was told that the CO₂ tests showed that the gear was OK from that angle as well.

The causes of shallow water black-out can be many and various, but I am prepared to state, and this without fear of contradiction, that there is an added risk in diving with regenerative equipment but provided the gear is of good design, that the absorbent is fresh, that the diver breathes normally and not shallowly and that provided a depth of thirty feet is not exceeded, regenerative equipment will not ever prove unreliable up to its known duration.

Gordon Lumley has died . . . I feel that he would not have died had he not been diving alone . . . a companion would have seen the trouble coming in the visible reactions and none of us would have need to go tomorrow to pay our last respects to the man who has without a shadow of doubt, done more for the sport of underwater swimming in South Africa than any other person. ➤

CONGRATULATIONS...

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THAT YOU BUILT

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Here's the way it worked.

During the past few years, Voit has asked hundreds of expert skin divers the same questions...

"What do you like about your present fins?"

"What don't you like?"

Let's look at a few...

"I get foot and leg cramps if I use the fins too long."

Voit moved the propelling surface back around the ankle, where it should be. Some of the stiffness is left out of the fin for easy, powerful flutter action.

"I walk on rocks and coral getting in and out of the water."

Voit put a full foot-pocket in the new Sea Hawk fin for top protection and slipper-comfort.

"Some big fins just add extra weight without giving extra power."

The new Voit Sea Hawk puts the propelling surface where it can deliver maximum thrust with minimum effort.

"My fins wiggle in the water. I have to keep my legs stiff to get maximum thrust."

The new Voit Sea Hawk has parallel ribbing that channels the water off the fin, keeping your kick "grooved."

The curved shape and modern design of the new two-tone royal blue Voit Sea Hawk fins combine top styling with top performance—maximum thrust with minimum effort!

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Body Recovery At 210 Feet

Photograph taken by Parks when they arrived at the scene of the unfortunate Trainer type aircraft, 210 feet under the Pacific.

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By RAMSEY PARKS

Ramsey Parks and Gordon Tyner of the Los Angeles County rescue boat "Baywatch" enter the water to search for the crash victims.



About 5:10 P.M. on the evening of December 23, the night before Christmas Eve, a call came into the Los Angeles County Lifeguard switchboard. A small aircraft had crashed about $\frac{3}{4}$ of a mile off the famous Marineland of the Pacific, located in Palos Verdes, California. The Lifeguard rescue boat, "Baywatch" was immediately dispatched to the scene, as was the Coast Guard and Los Angeles County Sheriff's Aero Detail.

The crash was witnessed from the upper deck of Marineland by their Chief diver, Ted Davis. Davis took a bearing on the top of the wall with a pencil. A bearing was also taken from the Marineland Pier, about 300 yards south of Marineland, by Les Donald Arndt, 20, another employee of Marineland. Arndt jumped into an outboard skiff and headed toward the scene of the crash. The dusk and light chop made it difficult to see very far. From the top of Marineland, Davis had heard the whine of the engine and turned his head to see the single engine, low wing, World War II (BT-13) trainer hit the water. "The wings were sheared off as it hit, and she sank immediately." Through binoculars, he could see two persons emerge.

Arndt picked up Jerry M. Buzan, who escaped with face lacerations and back and shoulder injuries, said that both he and the other passenger, Michael Lee McCown, had escaped from the sinking aircraft and swam to the surface. The pilot and owner of the airplane, Jerry F. Dowdy, had gone down with the aircraft.

Buzan said that when he and McCown were in the water, he could see that McCown's face was covered with blood. The two survivors drifted apart. McCown's body has not yet been recovered.

The "Baywatch" and the Coast Guard cutter spent several hours combing the area, but to no avail. A buoy was dropped in the approximate area where Buzan was pulled from the water. The "Baywatch" returned to the Redondo Breakwater and the eight members of the Los Angeles County, Department of Parks and Recreation, Lifeguard Diving Team were alerted.

The members of the team, Don St. Hill, Gordon Tyner, Jack Wise, Mickey O'Brien, Bob Burnside, Rex Guthrie, Buzzy James, and Ramsey Parks met at the Redondo Breakwater early the next morning. The diving gear was loaded aboard the "Bay Watch". While the boat was underway to the scene of the previous night's tragedy, the divers began to discuss the available information and the problems that might be encountered.

Upon arriving at the scene, the bearing is taken from the Marineland Pier. The "Baywatch" strikes out slowly on it. Meanwhile, one of the Lifeguard radio cars is on the pier and in touch by phone with a Marineland employee at the bearing on the Marineland's upper deck. The "Baywatch" is out nearly $\frac{3}{4}$ of a mile, when the radio car comes in, "Get ready . . . Mark"! The anchor line is lowered: Ten, Twenty, Thirty, Thirty-five fathoms before she hits bottom. The bottom, and the airplane, if we were on the right spot, is 210 feet below us; an extremely deep dive, even for an experienced diver.

Below 150 feet, breathing compressed air has a narcotic effect. The diver must control his ascent to the surface. On spending 15 minutes or less at 210 feet, he must stop at 10 feet for 35 minutes, less the nitrogen in his system comes

out of solution as bubbles. Blocking circulation, these small bubbles can cause paralysis, permanent damage to the nervous system, and possible death. As foreboding as this may sound, the danger to the careful, well-trained, and experienced diver is not excessive.

The engines are shut down and the glassy surface of the near area is searched for oil slicks and bubbles. Over half an hour goes by before Parks and James sight bubbles 60 feet off the stern of the "Baywatch". The anchor is pulled up off the bottom and the boat is backed down. The anchor is reset. Looking over the side, we can see the bubbles periodically popping to the surface. The missing aircraft is evidently directly below us.

Two divers are chosen to make the descent. Gordon Tyner, 34, skipper of the "Baywatch" and Ramsey Parks, 23, begin to slip into their skin-tight foam neoprene exposure suits. The other members of the team make ready the diving gear. Lungs with double 70 cubic foot compressed air bottles are hooked up, and a decompression stage with extra air bottles is rigged over the stern of the boat. Face masks, fins, weight belts, underwater watches, depth gauges and lungs are donned.

Tyner and Parks drop into the cool, 59 degree water. Watches are checked. The okay signal is given and the divers start kicking down the anchor line, exhaling into their masks to equalize the pressure inside, and swallowing to equalize the pressure in the inner ear. The water is fairly clear, and the divers can see about 60 feet. At 50 feet, the water temperature drops a couple of degrees. At 100 feet, the light is quite

(Continued on Page 45)



Ahoy and all that salty old jazz . . .

Your votes (on whether or not to give this waterlogged page the Deep Six) are still washing in, and it's anyone's wild guess which way the tide will turn. Mail was especially choice this month. So are the pictures. Crazy. Please to note that schnarby little Mermaid in the ballerina-bathing suit. Jeezely. Now that we are surrounded by Summer, I trust everybody is enjoying good diving; and that you're observing all the safety regulations. If you have a moment—let's leap feetfirst into several inches of human babble . . .



I read your Driftwood page every month. Being as you're not a cowardly columnist, how about going a round or two with my husband? His picture enclosed. I'll probably get speared for this.

EARLINE HIGBEE
3269 Cedar Avenue
Long Beach 6, California

You can't fool me: I know Charles Atlas when I see him.

Gadzooks, what a shock! You really look like that drawing up there in the corner! My faith in you has been shaken to the core! Nevertheless, I'll continue picking up my copy of SKIN DIVER each month. Chin up, old man—looks aren't everything!

GENNY WHITESIDE
Box 229
Bell Buckle, Tennessee

Naturally, not when one has Talent.

I am in complete agreement with you on the subject of Scuba spearfishing versus Skin Diving spearfishing! After all, why should I feel like a heel? I'm just not as long winded as some people! When using a lung you can be a little more choosy, if you like! Even though this comes from a Scuba woman, there are quite a few Scuba men, around here, that also agree!

ELNORA BREWER
South Bend, Indiana

If you don't want to feel like a heel, there's no law that . . .

Your page is real gone, Kohler, but we like it! (?) Two Beer City divers and myself went to Green Bay, Wisconsin, to do some diving and found the water cold and muddy. Our host, Vern Kamholtz, took us further north to Sturgeon Bay and, there, we found good visibility but even colder water. I come, originally, from Maine (known for New England hospitality) but, believe me, the hospitality here is ten spear-lengths ahead of Maine!

EVERETT FOSTER
President, Devils of the Deep
165 N. 67th
Milwaukee, Wisconsin

They're gonna hate you, in Maine, for that remark.

I see another starfish clean-up is planned for Los Angeles waters, but the California Council doesn't know what to do with the resulting predators. Seeing as how you're an old hand at disposing of dead starfish, I can hardly wait to see if you will supply a solution to the Council's problem.

NICK MURRAY
Winnetka Beach Bolsheviks
Winnetka, Illinois

Don't hold your breath while you're waiting, buddy-buddy.

My husband and I read the SKIN DIVER, cover to cover, and enjoy every word—including most of yours! We're members of the Concord Diablo Divers. We have about thirty members, with new ones joining all the time. I'm enclosing a picture of my husband, Jack Wessman. He sells skin diving equipment, in his store, and has interested many fellows in the sport. He is Vice-President of his club and won all three trophies last year: for the biggest fish, the biggest abalone and the best underwater movies. He designed and made his own underwater camera case for a brownie movie camera. He has, since, made three more for fellow club members. His underwater color movies are excellent and he has shown them to other organizations by request. This sounds suspiciously like a fan letter, but, after all, I guess I am his biggest fan!

CAROLYN WESSMAN
2061 Mt. Diablo Street
Concord, California



Yes, but does he help old ladies through the rough surf?

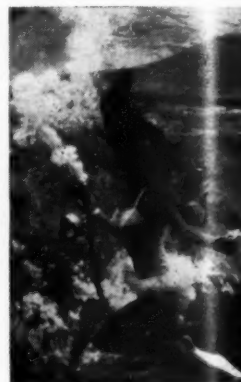
While gazing at your "handsome," smiling countenance, in the May Issue, a couple of things began bothering me slightly. I can see the practicality of the Fluorescent light-fixtures growing out of the back of your head—when it comes to typing and such—but how the heck do you get a hood over it, when diving? And, secondly, are you also wired for Hi-Fi?

MIKE SORBER
Tacoma Scubaneers
10312 Hipkins Rd. S.W.
Tacoma 99, Washington

I wear a customized hood constructed from righthand inner tubes salvaged from a '23 Essex. Yeh, I'm wired for Hi-Fi; but the extension cord keeps tripping me up.

I would like to answer a letter by Don B. Bell, regarding the "absolute" absence of Mermaids. Sorry to disagree with you, old boy, but there are Mermaids and I can prove it, easily—being one, myself. Enclosed: photo of myself feeding pet fish in Weeki Wachee Springs, Florida. I'm here, in California, now; swam across the Gulf of Mexico with some whale-friends of mine. Johnson Island sounds so nice—you mustn't be surprised if, one morning, you wake up and find a Mermaid in your lagoon!

ROSEMARY HARROD
234 East Pearl
Pomona, California



Jeezely. Keep an eye on that LAGOON, Bell!

I dunno if you even read letters from us ex-teenagers, judging from the endless "I'm 15 and I think you're great" or the "I'm 19, keep up the great work." Well, I'm 34 and I want to compliment you, too. What with car mags, poptronics (ugh) and the SKIN DIVER you must be sporting a solid gold scuba. Haven't seen you in FLYING yet. What's the matter—one of the hobbies getting by your? If you're still a bit short on your yacht payment, try me with some ham-radio cartoons—I might be able to help. What island is Kitty Jean heading for? I'm all packed. Being single, I still have one major hobby over you, old boy! At least set me up with some Pen Pals (heh, heh) in the SKIN DIVER—prefer them to be between 20 and 35, reasonably gorgeous, intelligent . . . pass me another one of those peculiar cigarettes.

WAYNE GREEN W2NSD
Editor, CQ Magazine
300 West 43rd Street
New York 36, N. Y.

If you reasonably gorgeous, intelligent girls (between 20 and 35) are interested in writing to a famous, alert, Big City editor of a well known magazine—here's your chance. What's the trouble, Wayne—those CQ typists catching on to you?

Kohler, you give me a pain. I think your *Driftwood* page is a real drag, and I think the SKIN DIVER would be better off without your snide stuff ranking up an otherwise swell magazine. Why don't you get lost at sea?

HARVEY GROSSMAN
Tampa, Florida

I can't swim that far.



My husband is an active skin diver and reads your magazine every month. I also enjoy it, and noticed in the May Issue that readers are "instructed" to send pictures. Enclosed: a photo of my husband after a cool dip in Lake Arrowhead this winter. Thanks for your wonderful magazine and your most enjoyable column.

MRS. MARVIN MINDELL
4731 Mayfield Avenue
San Bernardino, California

Hey, Marv, what's in the bottle, man?

My husband, Hank, has been skin diving for over a year and loves it. Two weeks ago, he decided to go to Florida for the sole purpose of diving and exploring the unknown. After eight days he returned and had many fish stories to tell me. Finding a pack of matches from a burlesque show, in Florida, I questioned him. He told me the biggest fish story ever: Hank informed me there are many strange underwater sights in Florida. Now I ask you: Do they have underwater girlie shows? And should I let him go again? He is 6-foot, 6½ inches and weighs well over 200-pounds, but don't be afraid to tell me if you think he fibbed to me. I'm 5-feet, 2½ inches and have been holding my own for almost three years. I'll protect you.

EVE MILLER
690 Roosevelt Avenue
Lindenhurst, Long Island

I don't give a d... if he's nine-feet high: if there's anybody I can't stand, it's a woman with a suspicious mind. Maybe innocent old Hank bummed the matches off a Florida bachelor.

TEENAGE SKIN DIVING PEN PALS ASSOCIATION . . .

The following names and addresses concern divers in the 13 to 17 year old group. They would very much like to hear from individuals and clubs from everywhere. For crying out loud, somebody write to them.

DONALD WILLIAMS
1602 Waverly Way
Baltimore 12, Maryland

RICHARD PARKER
Box 82
North Sebago, Maine

TED KAZIMIROFF
293 East 201st Street
Bronx 58, New York

BOB GUSTAFSON
414 South 4th Street
Mount Vernon, Washington

RICHARD WHISMAN
719 Castro Street
San Francisco, California

In reply to Ann Kramer's nasty little note to you, in the May Issue: I think she's just jealous, Kohler, because you're loaded with ability and good looking in the bargain, too! She's probably some dried-up old maid. Anyway, her frustration sure is showing. Personally, I think *Driftwood* is marvelous—and you're just as dreamy as I always really thought you would be.

SHIRLEY MAE HALVERSON
Boston, Massachusetts

Don't stop there—tell me more.

It seems to me that writing the *Driftwood* page must be one truly enjoyable job. Especially reading all those letters from girls. Don't you think it's more of a job for a dashing, single guy? I'd like to apply for the job if Sylvia ever decides to keep you home. I'm a diver-writer, too, and I think I could learn to give infuriatingly superior answers to letters, if I had the chance.

KEITH McDONALD
General Delivery
Galveston, Texas

You work your side of the street and I'll work mine.

SKIN DIVER—July, 1957



"YOU GOT MAPS OR RADAR OR SOMETHING, JACK?"

In the May Issue you said you realized that you're chubby. I think what Joe Lopicolo meant by "a group" was that you have four corners.

D. BOYER
3912 West 147th Place
Midlothian, Illinois

Well, doesn't everybody?

I just love to read some of your remarks. By the way, you aren't too bad looking. Since you wanted pictures of divers,



I thought I'd send this one of my dad, Al. He belongs to the *Marin Skin Divers, Inc.*, of San Rafael. My brother, Stephen, is the youngest member—being only 14—but he manages to go out with the rest of them. I'm sending this picture in without dad knowing it, and he sure will be surprised.

DONNA HART
1000 Humboldt Street
Santa Rosa, California

Crazy. But how about one of yourself?

I know you insist upon all letters being fully signed, but if I put my name on this—I'll never hear the end of it: my husband would probably go through the roof if he knew I am asking you for advice. I want to know what you think about a diver who takes his family along, on outings, and then raises sixteen kinds of Cain when I simply ask to try his Scuba for just a little while. I make darn good coffee and I'm wonderful company, but I don't think I'm getting a fair shake when it comes to getting in on the diving. What do you say?

A DISSATISFIED WIFE
Eugene, Oregon

I say about every diver I know would like to find out exactly how your husband manages to get away with this fine, firm policy. I hope he sees this—and tells us.

. . . and so we stagger back ashore after another invigorating dip into the soggy shallows. Dive sanely, exercise caution and keep your fins wet, you characters.

KOHLER, OF KOURSE



Dr. Hannes Lindemann sails into Yacht Haven, St. Thomas, Virgin Islands boat anchorage. A few minutes later he climbed stiffly ashore—the first time in 76 days, after leaving Las Palmas, Canary Islands, in his little 14' kayak. With sails rigged on spare paddles for masts, an inflated rubber outrigger, he dared to cross the Atlantic in this little boat. The hull itself is rubberized canvas stretched over a collapsible wooden frame.—Photo by Howard Johnson.

By **HARRY L. FRIDMAN**

German Scientist Experiments for 76 Days in Open Boat

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SPEARFISHING is the key to prolonged survival at sea, according to Dr. Hannes Lindemann. The 34-year-old German practitioner crossed the Atlantic in a kayak—76 days with scarcely more than a few cans of condensed milk, a trident and a speargun.

A dedicated student of oceanography since childhood, the tall, blonde doctor proved, among other things, that the nutritional part of survival is not too difficult at sea. As a result of this, the second of two long, hard-suffering Atlantic crossings alone in miniature boats, Dr. Lindemann believes a man similarly equipped as he was, perhaps with trident alone, could survive for one year at sea. Food would present itself by the side of his boat or raft.

He left Las Palmas, in the Canary Islands the 22nd of October and landed at St. Thomas, Virgin Islands, on 3 January. He believes that two men together could catch much more fish than they could eat.

By spearfishing, he does not mean with mask, snorkel and fins. They are unnecessary, he said. The survivor needs only a husky trident, on a staff at least six feet long (the longer the better), and securely anchored to the survivor's vessel with a stout line. The fish, mostly dolphins and triggerfish, present themselves as easy targets by the side of the boat and can be speared from above water. He even caught four triggerfish by his bare hands. But, Dr. Lindemann warns, pick something your size if the spear or trident is not properly secured. He lost his trident on the 57th day at sea when his little Foldbot, a rubberized canvas affair with folding frame, capsized. He still had his speargun. But at the beginning of the first two weeks at sea he lost the spear in a large dolphin. It is interesting to note that he did not catch a single fish with his hook and line.

But the secret of this survival might be a little hard to take for even the hardest, died-in-wool spearfisherman. The nutrition is in the organs of the fish, not the flesh—the heart, liver, brain, roe, milk from the female fish. But leave the kidneys alone.

"It is unbelievable to others, I suppose," Dr. Lindemann said, "but the organs have a good taste—raw. They are much better raw than cooked. Of course, it takes a bit of courage to try them, but after a few days of hunger, it is not difficult to take the first bite."

Pure, fresh water also comes from the organs and flesh of the fish, in a pinch. The doctor caught rainwater whenever possible in his sails. He had two on his kayak. But for days on end there was no fresh water, only the water he could suck from the fish. And he survived. One might say he ate fairly well. He had stuffed himself into an overweight 209 pounds before leaving Las Palmas. He stumbled out of his boat at Yacht Haven, in St. Thomas Harbor, 76 days later, a lean 165 pounds—only ten pounds below his normal weight of 175!

Dr. Lindemann was not trying to create a sensation by attempting to cross the ocean in a cockleshell. He was busy proving several theories about survival that have evolved out of years of boating, study of the sea, and his long years of medical study at Poznan, Marburg and Hamburg universities.

The self-imposed suffering and discomfort of his two unusual voyages came not from diet, but from other theories he was attempting to prove. His first voyage was in a native Liberian dugout canoe, 24 feet long by 17 inches wide, equipped with a gaff-rigged mizzen sail and a square mainsail. He left Portugal in May, 1955 and landed at Haiti in February of 1956, having spent 119 days at sea.

His theories and problems were:

1. Can sea water be drunk in any dilution whatsoever for survival? It can't.
2. Is it possible to retard or suppress sleep drunkenness or fatigue drunkenness? This is a state of extreme fatigue wherein one can become active, suffer a sense of panic to the point of throwing things over the side, and even to the extent of throwing oneself over the side to drown. He found it is possible to suppress this state.
3. The food problem. Solved as described.

The first problem was solved very early. On several earlier trips

(Continued on Page 42)



Still shaky and weak from two and a half months of constant sitting, Dr. Lindemann collapsed as he crawled from his tiny craft. Unable to stand or exercise his legs properly during his long voyage, they refused to hold him at first. He quickly regained his strength.

SKIN DIVER—July, 1957



By
WALLY POTTS

Autobiography of a Skin Diver

Wally Potts, one of the greatest divers on the Pacific Coast, shown here with his 40 1/2 pound black sea bass.

I started my underwater diving activities in 1937 after the advent of the Japanese face plate and made my first dive off La Jolla, Calif. The water was very clear and I was amazed by what was to be seen. I saw more per time spent on those first dives than I see today. In those days I saw *all* the things that swim and move, even the very smallest things, now I see only the things that I am looking for. For instance, if looking for halibut, I concentrate on the ocean's sandy floor and unless something extraordinary passes by I pay no attention to it. I joined the Bottom Scratchers Diving Club in 1939, which at that time, had been operating six years, I became the sixth member.

The diving equipment that could be purchased in those days was limited to the early Japanese face plate. The older divers will remember this item as very uncomfortable and leaked badly. Because of this I developed my own design face plate which is superior, even to this day, to any commercial item. Many divers that have used my mask say they wouldn't have any other.

I have teamed with another diver, Jack Prodanovich, and together we have invented, designed and built many items that are now standard pieces of diving equipment. These items include the early model spears, goggles, abalone irons, fish stringers, face plates, spear guns, floatation gear, powerheads and even diving sleds.

It is difficult for me to designate any one particular goggle fishing site as best. For instance, if looking for abalone I favor certain areas and if looking for halibut I like another area. If looking for white sea bass, yellowtail

SKIN DIVER—July, 1957

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or black sea bass I like still another area. If I had to name one general area as best it would be the La Jolla region. Within this region one can find almost any kind of diving, excellent shallow water skin diving or the best of deep water lung diving.

As for the type of preferred equipment: I like my own designed equipment best. The only equipment that we do not make is the swim fin and even on this item we have contributed ideas that have been incorporated. As for the specific make of fin I like the Owen Churchill design.

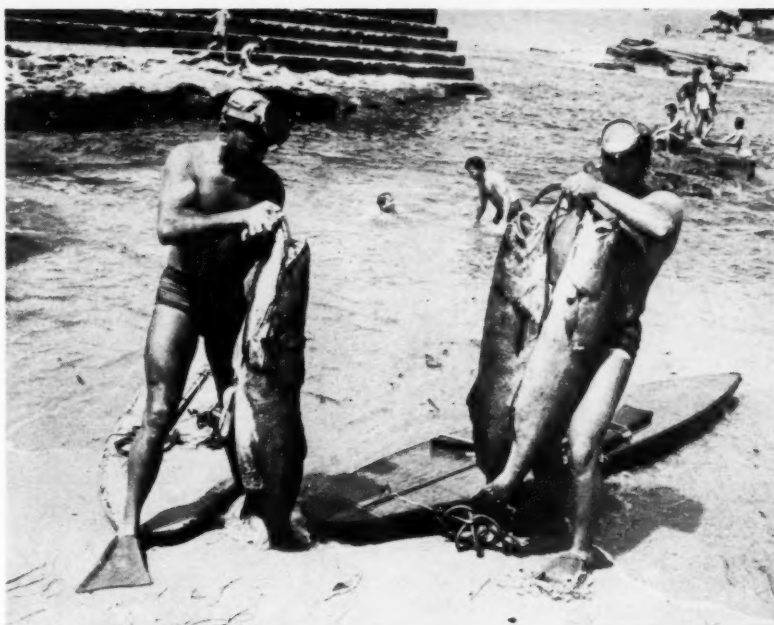
In general I do not consider the average shark as dangerous, however, that does not mean that I don't think any of them won't bite. The great white shark will attack most anything, most of the shark attacks on people have been done by this specie. The thing that I am prone to fear more than anything is the killer whale. The largest fish of any kind that I have taken is a 401½ pound black sea bass.

The most interesting adventure that ever happened to me took place on an afternoon in which the big one got away.

This was many years ago before the days of spear guns. I was diving in the kelp beds of La Jolla with my diving buddy Jack Prodanovich. For spear equipment we were using .38 caliber power heads fixed to an eleven foot pole using darts and line, the power heads at that time were still in the development stage. We got into an area where there were yellowtail swimming about. Now as most divers can attest the yellowtail is normally a very fast and steady swimming fish and to take one with a pole spear you would really have to be on the ball. With this in mind I hope you can appreciate the experience I will attempt to portray.

After several attempts to get close enough to some of these speedy fish I was finally able, after a very long dive, to make a hit. As luck would have it the .38 cartridge was wet because it did not fire. I again made several other long dives, not deep but lengthy, before making another hit. Finally five fish came swimming by about ten feet under the surface and I took off after them. After a very long swim holding my breath, I caught up to the tail-end Charley, about a 45 pounder, and made a hit.

Again as luck would have it, or vice versa, I had equipment trouble. This time the cartridge fired but the force of the shot caused the line to break. I can still see that dart as if it had happened only yesterday. The dart came out the other side of the fish and kept right on going like a little torpedo. The line pulled out of the fish leaving it as free as a bird. However, the dart



Bottom Scratcher members Jack Prodanovich (l) and Wally Potts (r) land on the beach at La Jolla with their spectacular catches. The white sea bass from the kelp beds weighed a total of 140 pounds. The two famous San Diego divers make and improve most of their underwater equipment. Photo by Lamar Boren.

apparently hit a nerve or a bone causing the fish to react crazily.

It fluttered through the water like a butterfly not knowing where it was going. I thought, this fish having the shape, tail it has, that maybe if I could get close enough, I could catch and hold it by hand. So as the fish was fluttering through the water I was frantically trying to catch it.

Finally, I made a near catch actually touching the fish. As soon as the fish was touched it sounded and went straight for the bottom with me in close pursuit. The water depth was about 45 feet. The fish was still in a state of shock and swam downward until it ran into the bottom, then would swim parallel to the bottom until it ran into a stalk of kelp or some other obstacle. In each case I would gain on the fish. I finally got my hand on the tail and was able to hold on. Due to the lack of air I had no time to properly get a better hold in his gills.

I noted that we had swum under a large kelp mass, so rather than come straight up through it, I turned around and swam out and then started to go up. I would get about ten or fifteen feet off the bottom then the fish would do his act and down to the bottom we would go again.

After making like an elevator a couple of times, I'd had it. Those white spots and stars started swirling around in my head and I decided to let go of the fish. I must still have been down thirty or forty feet. The last thing I remember is turning the fish

loose, then awakening on top of my buddy's surfboard with him pounding on my back in hopes of reviving me.

He filled in the rest of the story. Knowing I had been down much too long, he had started hunting me when he saw me pop to the surface. I floated there with my hands outstretched and my face down in the water. He got to me as fast as possible and pulled me aboard his surfboard and went to work. He said that I had been down five or six minutes.

After waking and resting about ten minutes we took off, me looking for my valuable power gun which must have dropped the same time that I turned the fish free and him looking for the fish.

Then we set off for the beach. I felt no ill effects of the near self-suffocation. To this day the experience that stands out foremost in my mind is not one of the big ones speared, but this incident in which the fish got away.

Who do I think is the best spearfisherman? I am going to side step here because I'm sure that this question is too controversial. Instead I'm going to mention who I think has done the most to promote the sport of spearfishing. This man, in my opinion, can only be Jack Prodanovich. He is responsible for the early day goggles, then the metal face plate, early underwater pictures and the complete system used in taking large fish, the power gun, floatation gear, etc. >

Plastic Eyes

By

SHELDON WACHSLER, O.D.

Practically everyone likes diving on those days when there is good visibility. But this article isn't for those lucky ones who can just put a mask on and splash right in. This is for the bunch who normally wear glasses to see clearly and have one helluva time wearing them underwater!

Plenty of you guys who wear pretty thick glasses know just what I mean. If you just take off the specs and put on your mask things look pretty blurred. You might just as well use a hand spear because you can't see far enough to use an arbalette anyway. The gadgets that fit into a mask give good clear vision but it shrinks the width of the field down to almost nothing.

The cure is pretty simple—contact lenses. I've been wearing mine for over two years. For skin diving they are as essential to me as my mask and fins. And I need no special gadgets or preparations before I hit the water. Fees for lenses and fittings, \$150-\$200.

I use a regular mask with no attachments or ground glass. My field of view is as good as it can be. (The field is only limited by the mask.) And, of course, my vision is clear, both in and out of the water. Also, there is nothing

to wear out or be damaged on the beach.

Getting fitted for contact lenses is a bit more complicated than being fitted for regular eyeglasses. But there are competent men all over the country doing contact lens work. It takes a good fitting plus a period of learning and perseverance. Most people wear contact lenses for eight hour stretches after just a few weeks. It takes a little longer to wear them all day long, and then after a while you can wear them day and night.

For divers, even the beginning periods are no complication. Anyone can wear contact lenses for an hour or two. Certainly you can wear them for a longer time than you can make a tankful of air last. Also, for beginners there is often a feeling of hotness around the eyes and the sea water around your mask is a good cooling system.

Probably most divers have heard of underwater contact lenses. With these lenses you can see clearly while diving without a mask. Actually, each lens has a tiny mask built right into it. These are pretty good for short periods of

time, but for general use by divers they have some disadvantages. You get shorter wearing time with these lenses—generally enough time to dive but not enough to wear the lenses in between dives also. Secondly, the protection from cold that the mask gives the upper part of the face is gone. Unfortunately, underwater contact lenses are more a tool for special situations than for general wear.

Because of recent demand for a good contact lens for general use and for sports, there have been many advances in design. As a result, it is now possible for divers who used to dive in a fog to see just as good as water visibility will allow. We all like to spear the big ones when diving, but now when a smaller target swims by we stand a fighting chance of coming in with some fish fry.



Which eye does not have a plastic lense? Close examination will tell you that they all look the same. The eye on the extreme left of the picture is without a lense.



Comparative articles of equipment portray the size of the small plastic lens.



Johnnie Carroll of the Dolphins and 24½ pound halibut taken at Palos Verdes, Calif.

SKIN DIVER—July, 1957



MOROCCO

By R. Dougherty

It was in May of 1956 that S/Sgt. R. B. Hyde and I decided that we would try to form a skin diving club here at Nouasseur Air Depot, Casablanca, Morocco, North Africa.

There were some fellows on the base that had done skin diving back in the states. Most of them were interested in forming a club, but they did not know there were others who were interested also. So on June 6th a meeting was held to assemble prospective members. Twenty-one persons appeared at the meeting and stated they would like to form a club. As things turned out the base would not sponsor the club. The meeting did accomplish one thing, it gave the fellows a chance to meet others who were interested in skin diving.

We found that the water along the coast here at Casablanca is cold all year and that there are only two months out of the year that we could get in some good diving, and that was during the summer. There may be a lot of fish in the waters along the coast but we never saw many of them. We found Octopus, Sea Spiders or Spider Crabs, Flounder, Sting Ray, Moray, Shark, Torpedo Ray, and there are a lot more which we didn't see.

There are some wrecks up and down the coast that were sunk during World War II. One of the skin divers, Larry T. Chandler, and myself heard there was a submarine that had been sunk in 1940 in a cove about eighty-five miles down the coast from Casablanca. We went down to the spot and found the sub but the water was so cold that it was impossible to stay in the water for more than ten minutes at one time. By the way, we were using lungs and no suits. Larry was on his way up from one of the dives to the sub and speared a boar fish, the most ugly thing I have ever seen. After Larry got the fish in the raft we were so cold that we didn't go down again. Next year if we are still here, Larry and I are going back down to the sub and try to get some pictures of it.



First white sea bass of the season aboard the "Scuba" was taken by Clark Ward. Many of the 'whites' and yellowtail have been seen by the divers off the charter boat at Catalina but Clark was the first to land one.—Photo by Johnie Carroll.

● BOOK ● REVIEW

MARINE LIFE by Carleton Ray and Elgin Ciampi. Illustrated by Teiji Takai, foremost Japanese artist. Publisher: A. S. Barnes and Company, 232 Madison Avenue, New York.

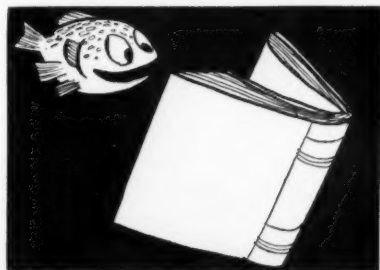
Never before has there been so much interest in underwater life, and how the creatures of the sea live and look. No longer will skin divers (or anyone else, for that matter) have to struggle through a series of books to obtain factual evidence of what exists below the waterline.

In *MARINE LIFE* the authors present—for the first time—a truly mammoth guide to marine life, written specifically for use in its field and presented in such clear language that anyone can easily absorb its accurate contents without feeling they are reading a "dry" book. It contains rules of the thumb for identification of all groups of fishes and the most common species of underwater plants and animals.

MARINE LIFE is jam-packed with illustrations and plates in both black and white and full color. This book is divided into three major sections: *The Sea, Flora and Lower Fauna and Animals with Backbones: the Vertebrates*. Unless you're a rabid birdwatcher with no interest in oceans, lakes, rivers and streams—and the fabulous critters who abound therein—you'll find yourself referring to this fine book, time and time

again. Read it long enough and your friends (even those wise guys who know-all-there-is-to-know) will begin considering you as one of the experts. *MARINE LIFE* will supply you with sufficient fact-material for a lifetime of sparkling conversational-gems — and then-some. It's type-face is large and clear, and the dandy word-index at the back of this book makes for instant-reference on almost everything pertaining to fish, submarine plants and related subjects.

The invasion of the last of the major frontiers has started. In *MARINE LIFE* authors Ray and Ciampi have brought the sea and its denizens into sharp focus. Basing their book upon the results of several scientific underwater expeditions—in which both authors participated as diving photographers and specimen collectors—Carleton Ray and Elgin Ciampi have, in creating *MARINE LIFE*, now made it possible for you to put extensive know-how, thousands of fish-facts and mucho marine information right up there on the bookshelf—with your other treasured books.



flipper mc splash

By PETE MILLAR



Your best assurance of getting a copy of

"THE COMPLEAT GOGGLER"

is to buy in advance - see page 31

OUR WET WORLD by JOE GORNALL

A PUPPY?

NO, A SEAL CALF! THIS MAGNIFICENT ANIMAL'S STRIKING RESEMBLANCE TO AN IRISH WOLF HOUND LASTS BUT A FEW WEEKS. THEY SOON TURN GREY, AND IN THE SHORT TIME OF ONLY 5 WEEKS, THEY ARE COMPLETELY WEANED AND INDEPENDENT.

DEEP-SEA FISH

SUCH AS THIS VIPER-FISH POSSESS GREAT ARRAYS OF NEEDLE-SHARP TEETH TO WAGE THE LIFE AND DEATH BATTLES OF THE DEPTHS. WITH NO PLANT LIFE, THEY LIVE OFF EACH OTHER AND ARE OF NECESSITY THE MOST VORACIOUS OF CARNIVORES.

THE GIANT SQUID

ANCIENT PREY OF THE GREAT SPERM WHALE

THE SEA-SERPENT

THAT MADE GOOD!! ONCE BELIEVED TO BE ONLY A MYTH, THIS 60ft. CREATURE THAT DWELLS OVER 1/4 MILE BENEATH THE SEA WAS FOUND TO BE A REALITY.

QUESTION: IF THIS "MYTH" CAME TRUE, WHAT ABOUT THE OTHER "SEA MONSTER" TALES?

NEW JERSEY COUNCIL OF DIVING CLUBS

By Warren Thiers

At the last monthly meeting of the NJCDC, elections were held for officers for the coming year. Fred Beisel of the Underwater Sportsmen of New Jersey was reelected chairman and congratulated for the fine job he did in organizing and building the NJCDC to what it is today. Also reelected were John Brown of the New Jersey Underwater Fishermen as vice chairman and Earl Edwards of the Jersey Aqua Dunkers as treasurer. Elected as corresponding secretary was Warren Thiers of the Plainfield Aqua Divers, and as recording secretary Kay Koopman of the Diving Jets.

It was brought to the attention of the NJCDC that the U. S. Coast Guard will keep all skin divers out of Shark River Inlet and Manasquan Inlet. The Coast Guard stations along the Jersey shore have been notified by the U. S. C. G. District Legal Office that anyone skin diving in any navigable waterway can be classified as a "hazard to navigation" and the Coast Guard has the authority to remove and/or put under arrest any such hazard.

Inlet diving has been banned for some time by organized skin divers in the Jersey shore area, but due to a few unfortunate incidents in the past by individual divers and out-of-state divers, a lot of bad feeling and criticism has resulted in the Coast Guard stepping in. This ban was formulated with the assistance of local organized skin divers and has the approval of the NJCDC. We hope this news gets to any skin divers planning to visit the Jersey shore.

Also at its last meeting, the NJCDC, which during its first year of existence has come to represent the vast majority of organized skin diving and spearfishing clubs in the state, passed the following resolution:

"The NJCDC will not sponsor within the State of New Jersey any spearfishing meet, the purpose of which is the taking of fish, nor will it sanction any of its members participating in any such spearfishing meet outside of the State of New Jersey in name of the council or in the name of any member clubs of the council."

This resolution was passed because

it is the belief of the NJCDC that competitive spearfishing meets, as they have been conducted in the past, do more harm than good for the sport. In the first place, the large number of spearfishermen usually competing in a relatively small area doesn't prove who is the best spearfisherman—only who is lucky enough to get off the first shot or two. After the first few minutes of such a contest, the only thing left moving in the area are spears and spearfishermen. So far these two haven't met in a fatal fashion, but how far can we stretch our luck? Secondly, what little enjoyment is derived from "aggregate weight" contests is more than overshadowed by the bad publicity which accompanies these affairs. One of the biggest complaints that anglers have with spearfishermen is that we are "slaughtering all the fish in the ocean." People who know the true facts about spearfishing know this isn't true, but why aggravate the people who don't know?

The NJCDC knows that every sport must have a champion. Spearfishing champions should be determined not by total weight caught in a short period of time such as in spearfishing meets, but by the largest fish during the course of a season. The NJCDC believes that the latter type of competition not only goes further toward proving a spearfishing champion but will also encourage conservation, a point which is far too often forgotten by all types of fishermen.

Third, the Jersey shore waters are predominantly murky. This is caused by the polluted waters emptying out of New York harbor and the sand in the water caused by the surf beating on the over 100 miles of comparatively unjettied bathing beaches. Seldom is the visibility more than 6 feet.

Until only a few years ago, very little was heard about skin divers, and unfortunately most of what has appeared in newspapers in this area since then has been adverse publicity. For the most part this is the result of an uninformed and misinformed public. The NJCDC has been striving in recent months to change this situation by disseminating factual information. Last month officers of the NJCDC gave a well received talk before the Essex County Salt Water

Dallas, Texas . . .

DALLAS DIVERS INC.

By Willis Logan

This year's diving season has been delayed in Texas by of all things, water. Yep, Texas has enough extra water to give every one in the world a big drink. It is not exactly conducive to good diving. The lakes are all overflowing and causing a major flood condition in most parts of our area.

The big news so far this year has been the successful passing of a new spearfishing law. It is now legal to spear all rough fish in the fresh waters of Texas, and Hal Lattimore of the Inland Diving Assn. is the man who did it. Congratulations for a job well done Hal.

Our club will attend the Southwestern Spearfishing contest at Lake Tenkiller the last of this month (June) with high hopes to coup the prize. We are having a practice dive for the contest the 16th at Possum Kingdom Lake.

At our last meeting we had the local game warden as a guest and discussed the new spearfishing law. Also we had a biologist from the fish and oyster commission speak, Leonard Lamb. Our next meeting we will have salvage divers from the local navy base speak and show some of their deep sea equipment. ➤

Pacific Grove, California . . .

MAD MANTAS

By Gary Passey

At the present time, due to Uncle Sam, our club is inactive. When in operation, it is a junior club, having no members over 21. There are several likely members around town, so in the near future we may get the club started again.

Anyone having any suggestions for a junior club, we will be glad to receive them. You can contact us through me; address: 1265 Sea View Ave., Pacific Grove, California. We will appreciate hearing from you. ➤

Milwaukee, Wis. . . .

DEVILS OF THE DEEP

By Tom Peters

On Memorial day, marking the first day out of school (Layton Art School), we had an outing at Lake Nashotah, which is about twenty miles west of Milwaukee, where we found conditions rainy and fairly cold, but water conditions were good. We had one rubber suit and two pairs of diving underwear to share among the six rugged members that participated.

An interesting sidelight was when several fishermen who were in the vicinity, asked the divers to find out where the fish were and upon finding out, immediately set out in that direction. ➤

Anglers Association in Montclair. As a result of this talk an invitation has been received to give a similar talk before the Bergen County Sportsman Federation. Anyone interested in learning the true facts about spearfishing may attend this meeting and the NJCDC would be happy to have representatives give similar talks to any sporting organization. It is hoped that by letting other people know the true facts about our sport, we can encourage and maintain harmonious, sportsmanlike relations with other sporting groups. ➤

AROUND the SOUND

By PETER PUGET

The Peter Puget column is compiled each month by representatives of the Pacific Northwest Council. Material for the column should be forwarded to Puget Sound Divers Co., 2520 Westlake Ave., No. Seattle directly or through any local dealer or club.

The first World Championship Octopus Wrestling Match, sponsored by the Puget Sound Mudsharks turned out to be a huge success. Bright sunshine prevailed and clear water, making the event enjoyable for both participants and the many spectators. The place was Titlow Beach, Tacoma, Wash. Date, May 5th. Time, 12:00 to 1:30 P.M. for the skin diving heat and 2:00 to 3:30 P.M. for the lung diving heat. Three points per pound were given for octopi taken skin diving, and one point per pound for lung diving. Spearguns were not allowed. (Washington state law prohibits spearing or piercing of octopi).

Divers met their opponents in a strictly wrestling match. Sixteen three-man teams participated. Top team of the day was the Oregon Skin Divers, who came up with a total of 459 points, all taken skin diving. Tom Amerman was the hero, bringing in what appears to be the largest octopus taken skin diving so far. It tipped, or better said threw, the scales at 70 pounds. Others on winning team were Bob Holmes and Bill Montgomery. Second place was taken by Puget Sound Mudsharks #1 team, consisting of Bill Mertz, Dale Dean and Dick Krause who came up with a total of 330.5 points. Another Mudshark team, #5, took third place, consisting of John Tallman, Mack Thompson and Jim Blanchard, with a total of 154.5 points.

Other participating clubs were The Tacoma Scuba Divers, Norwest Divers, Port Townsend Pile Divers, Sheriff's Scuba Divers of King County, and Sous Marina of Shelton. A total of fourteen octopi were taken, with a total weight of 558 pounds 12 oz. All of the octopi were displayed in an aquarium until after the meet when they were returned to the water or donated to the aquarium.

Every one generally agreed that it was a great day, and that the Oregon team who have participated so faithfully in meets over the past years with nary a trophy, were really deserving winners . . . this time!!! Worth of comment



Laadees an Geentleen . . announcing the Winners of the First World Championship Octopus Wrestling Match. In the foreground, "70 Pound Octo" . . . the vanquished challenger, and in the center of the ring, the new world's champeen, "Tommy Amerman" of the Oregon Skin Divers Club.

was Tom Amerman's reply to newsmen when they asked what it was like wrestling the octopi around, quote, "It's like trying to pick a broken egg off the floor." For the best description of the year goes the unofficial Nobel Prize.

The last time we counted noses there appeared to be eleven clubs in the Sound Area . . . How about hearing from some of you???

The "Y Divers Club" of Seattle are busy with preparations for a meet they plan to sponsor in conjunction with the Seattle Sea Fair . . . A big deal in these



Bill Mertz of the Puget Sound Mudsharks slithers up to the dry beach with a slimy catch. Over 558 pounds of octopus were caught during the contest.

parts. Date will be August 4th. Time 12:00 noon to 3:00 P.M. at Alki Beach, Seattle. A full set of rules and regulations may be had by writing Ted Yerbeck at 4035 W. Henderson, Seattle, Wash.

It is hoped that all clubs in Washington State will respond and cooperate with The Washington State Council of Divers . . . your response is essential to a good Council . . . Let's get together and work things out to benefit all of us. Write to Council of Divers, c/o Sam Meln, 1522 W. 190th, Seattle, Wash.

We've had it beaten, burgered, barbecued, and burned . . . but here's a new one straight from the fisherman's wife's mouth.

— Pickled Octopus —

Prepare and boil or pressure cook octopus tentacle as usual. Cool, pop buttons and slice tentacle in 1/2 inch slices. Marinate buttons and slices in vinegar, salt and pepper. Cucumber and onion slices may be added . . . Some dish!!

Warning . . . with the approach of warm weather we can expect the pleasure boaters to be in abundance . . . knowing that they are eternally on the prowl for seal . . . we urge divers to use floats or innertubes to mark their diving areas . . . There's a bounty on those little black noses . . . what's your's worth? >>>

NEW PRODUCTS



THE NEW AQUA-MATIC REGULATOR—Is the latest addition to the Aqua-Lung family. Developed by Jacques Cousteau and Emile Gagnan with the divers safety and pocketbook in mind. The Aqua-Matic can be used on standard tank blocks or valve combinations. The unit is constructed of stainless steel, chromed brass, hard-grade nylon and neoprene rubber. It is a single hose design, two stage regulator, built-in automatic reserve, and features non-return valves in the mouthpiece for easy cleaning. Price—\$29.95 for regulator alone or \$79.80 for 71.2 cu. ft. tank and regulator. Distributed by: U. S. Divers Co., Los Angeles, Calif.



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THE MARES SUPERFIN #101, used in establishing the world's free diving depth record of 134.51 feet, has been placed on the market by Pennsylvania Athletic Products, exclusive distributor for the Mares underwater equipment line in the United States. The Superfin #101 is designed with an offset angulation on the fin blade to provide tremendous thrust, while its slipper-type foot pockets assure snug fit and complete protection. These features offer the skin diver a high quality fin of proven performance.



THE PRODANOVICH GUN—This tried and tested equipment has been developed for those big fish you have been missing . . . Gun pictured has a fiberglass handle, stainless steel arrow and positive line drop. The rubbers are of best quality pure gum tubing to insure maximum stretch and hitting power. Accessories also available—flotation gear, .22 cal. impact head and special slip-tip heads for maximum penetration. Write today for information on this custom-made equipment: Jack Prodanovich Enterprises, 3824 Ampudia St., San Diego 10, California.



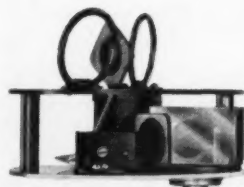
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NEW "SEE-SEA" AND "PUSH BUTTON" PRESSURE GAUGES—Underwater Pressure Gauges "See-Sea" (19.95) and "Push Button" (8.95). U.S. Diver's new underwater pressure gauges indicate air content of tank while diving or at any time. These gauges can be used only with the "Aqua-Lung" "J" Valve Tank Blocks When used with J2 (Twin) and J3 (Triple) Tank Block Valves, a special elbow is available. The 1755 "Push Button" is made of non-corrosive chrome plated brass. Under pressure the moving part of the device expands and uncovers colored plastic rings which indicate tank content. The 1766 "See-Sea" Gauge guaranteed against leakage to 300 feet, features a watertight gauge with luminous dots and needle, mechanical parts non-corrosive brass. Case of plastic and neoprene sun and salt resistant. Safety plugs in gauge case prevents glass from being ejected should Bourdon tube be damaged. Specially reinforced flexible high pressure hose designed for use underwater with safety coefficient "4". Instructions for quick, easy assembly packed with both gauges. Distributed by: U.S. Divers Co., Los Angeles, Calif.

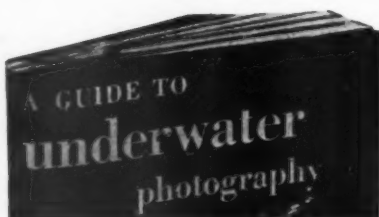


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SKIN DIVER—July, 1957

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SKIN DIVER

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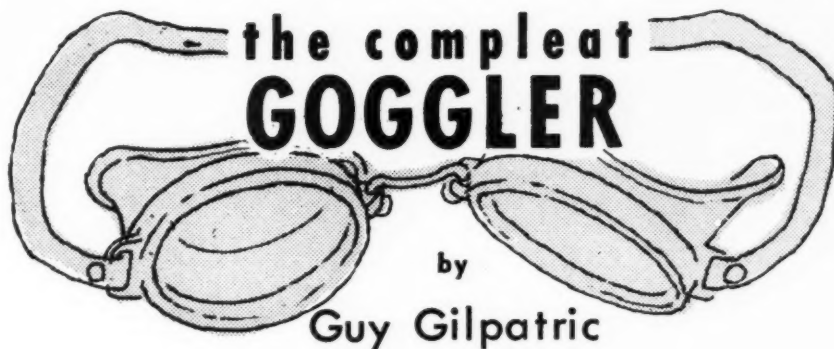
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"The Compleat Goggler" is now being re-published by "Skin Diver" in its original book form by popular demand after it was serialized in the magazine early last year.

A new foreword by James Dugan, author of "Man Under the Sea" and assistant on the movie and book "The Silent World," brings Gilpatric's life and the book up to a parallel with modern methods.

A precious limited number of copies are being made available. Be one of the first in your group to receive this outstanding epic of the underwater sport. This book is expected to be ready for delivery on or about July 1, 1957.

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COLLECTOR'S
ITEM



SKIN DIVER MAGAZINE

survey of

UNDERWATER SPEARFISHING

LAWS AND REGULATIONS

throughout the
UNITED
STATES
and Canada

Planning your vacation this year in a neighboring state? If you are and hope to get in some underwater time with a little spearfishing, check the brief summation for states allowing the spearing of fish by skin divers.

Approximately 73 percent of the 48 states allow spearfishing to some degree, although many of these states limit its use only as a means of cleaning up the rough, scavenger type fish and provide a better habitat for game fish.

Twenty-one per cent of the states allow no spearfishing of any kind and four percent have no existing laws, either forbidding or allowing spearfishing. The remaining two percent did not answer the survey.

Florida, Connecticut, Maine, New Hampshire, New Jersey, Virginia and Rhode Island have a yes and no policy on spearfishing. All seven states border ocean waters and permit spearfishing in their marine areas, but not in the inland fresh water lakes and streams.

The following reports from the various fish and game departments have been compiled over the past year and brought up to date within the last two months. However, many of the states are undergoing legislative changes. For any changes or more detailed information regarding local county laws, contact an official of the fish and game department in the state you plan to visit.

Always consult with State and Local officials before doing any spearfishing or skin diving for the current regulations and obtain the necessary permit or license for that State and area. By doing this you will be creating a favorable impression with the officials which will be extremely important in future legislation matters for that State. To offend, poach and otherwise disregard the laws of any State means only a minor fine for the individual but creates infamous public relations for the sport of skin diving at-large.

Spear fishing (two words), gigging, etc., are not always clearly defined in the answers we are publishing here on the 48 States. Our questionnaire specifically requested *underwater spearfishing* regulations. Spear fishing (two words) in some States means to stand on the bank or edge of a body of water and then throw or project the spear through the surface to the fish. *Underwater spearfishing* is clearly another method of hunting and has not, as yet, been thoroughly recognized by many legislators.

In reading this report of the underwater laws throughout the country you will notice how many of the archery regulations have been applied to underwater spearfishing . . . in some respects this is a mistake which we hope will be corrected in the near future. ➤

ALABAMA—Yes (Only in salt waters of gulf and T.V.A. Lakes on Tennessee River. No specie restriction in salt water; only rough fish in T.V.A. Lakes).

ARKANSAS—Yes (rough fish only for personal use).

ARIZONA—Yes (rough fish).

CALIFORNIA—Yes (ocean waters: fresh waters limited to Millerton Lake, Fresno and Madera counties).

CONNECTICUT—Yes (marine district), No (inland waters).

FLORIDA—Yes (Salt water, local county laws) No (fresh waters).

COLORADO—Yes (rough fish)

DELAWARE—No laws.

GEORGIA—No.

IDAHO—No.

ILLINOIS—Yes (rough fish: bill pending in legislature, any new laws become effective July 1).

INDIANA—No answer.

IOWA—Yes (rough fish, between May 1-October 31).

KANSAS—No

KENTUCKY—Yes (rough fish).

LOUISIANA—Yes (salt water: fresh water, rough fish)

MAINE—Yes (ocean waters), No (inland waters).

MARYLAND—No

MICHIGAN—Yes (consult conservation officers).

MINNESOTA—Yes (rough fish).

MISSISSIPPI—No.

MASSACHUSETTS—Yes (consult conservation officers).

MISSOURI—No.

MONTANA—No.

NEBRASKA—Yes (hand spears only, non-game fish).

NEVADA—Yes (non-game fish).

NEW HAMPSHIRE—Yes (coastal), No (inland waters).

NEW JERSEY—Yes (Atlantic, hand spear only), No (fresh waters).

NEW MEXICO—Yes (non-game fish, no gas, air or explosive driven spears).

NEW YORK—Yes (marine district, Yes (inland, hand spears only in waters and for species designated).

NORTH CAROLINA—Yes (very limited, only as means of improving game fish habitat, then under strict supervision).

OHIO—Yes (rough fish, Lake Erie fishing district only).

NORTH DAKOTA—No.

OKLAHOMA—Yes (rough fish).

OREGON—Yes (rough fish).

PENNSYLVANIA—No.

RHODE ISLAND—Yes (salt water) No (fresh water).

SOUTH CAROLINA—Yes (both salt and fresh water; restricted to rough fish in fresh water).

SOUTH DAKOTA—Yes (rough fish)

TENNESSEE—Yes (rough fish; limited areas).

TEXAS—Yes (rough fish in certain areas, new legislation pending, check game authorities).

UTAH—Yes (non-game fish).

VIRGINIA—No (inland waters), Yes (salt water).

VERMONT—Yes (only cold months of March through May, restricted)

WASHINGTON—Yes (fresh water; rough fish). Yes (marine district).

WEST VIRGINIA—No laws.

WISCONSIN—Yes (rough and pan fish).

WYOMING—No.

CANADIAN PROVINCES

MANITOBA—Yes (coarse fish).

ONTARIO—No.

SASKATCHEWAN—No special regulations.

BRITISH COLUMBIA—Yes

ALBERTA—No.

Manitoba — Ontario — Saskatchewan
British Columbia — Alberta — Alabama
Arkansas — Arizona — California
Connecticut — Colorado — Delaware

LAWS AND REGULATIONS

Canada

MANITOBA

"A skin diver may take coarse fish by means of a spear or speargun." S. Sigurdson, Director of Fisheries, Department of Mines and Natural Resources.

ONTARIO

"The use of spears for the taking of fish in the waters of this province is prohibited by the Ontario Fishery Regulation." W. J. K. Harkness, Chief, Fish and Wildlife Division, Department of Lands and Forests.

SASKATCHEWAN

"Concerning regulations governing spearfishing in Saskatchewan, we wish to advise that we have no special regulations covering this type of fishing. We have had one or two requests for a license and have issued special licenses permitting the spearfisherman the same privileges as an angler. As the popularity of this sport increases it will be necessary for us to have special regulations." A. H. MacDonald, Director of Fisheries, Department of Natural Resources.

BRITISH COLUMBIA

"Concerning underwater spearfishing and spearfishing laws in British Columbia: No special spearfishing license is required; however, the spearfisherman must be in possession of a current Angler's License. There are no age restrictions. There is no restriction on the type of equipment used in underwater spearfishing and skin diving. Throughout the non-tidal waters in this Province, spearfishing for any species other than trout, salmon, whitefish, bass, grayling, kokanee and char, is permissible. No size limit or possession limit for fish other than those listed above—therefore, in spearfishing, no size or possession limit. Any non-tidal waters are open for spearfishing. No seasons are specified." R. G. McMynn, Chief Fisheries Biologist, Office of Game Commission.

ALBERTA

"Spearfishing is not permitted in Alberta at the present time. Skin divers are relatively few in numbers and the merits of this sport are being considered." H. B. Watkins, Superintendent of Fisheries, Department of Lands and Forests.

United States

ALABAMA

"Spearfishing is legalized only in the salt waters of our gulf area and in the T.V.A. Lakes on the Tennessee River of this state. It is legal to spear all species of fish in the salt waters of this state. However, only the commercial or rough species can be speared in the T.V.A. Lakes." I. B. Byrd, Principal Biologist, Fisheries Section, State of Alabama Department of Conservation.

Commercial or non-game fish—The following shall be considered commercial fish or non-game fish: Drum, buffalo, channel-cat fish and all members of the catfish family; the spotted sucker and all members of the sucker family, including the species known as red horse and black horse. (Alabama Regulations and General Laws).

ARKANSAS

Arkansas Game and Fish Regulations lists as the only state law on spearing: "Gigging of game fish prohibited at any time. Rough fish may be gigged for personal use only, during the months of December and January, and from sunrise to sunset only during this period. Gigging of any fish prohibited for commercial purposes. Not more than 15 pounds of rough fish, plus one rough fish, may be taken in any one day and not more than 25 pounds of rough fish, plus one rough fish, may be had in possession at any one time. Included in the above, cannot be more than the daily limit on cat fish, provided that carp, gar and grindel may be taken and possessed in any quantities. Use of underwater light prohibited. Fishing license required." The state's license fee for a resident sixteen or more years of age is \$1.50. Non-resident fees, same age group, \$5.00 annual and \$2.00 10-day trip.

ARIZONA

"No special license is required for spearfishing, however, a regular warm water fishing license is required. This license is \$5 for non-residents. Persons under 14 are not required to have a license.

The law merely states that rough fish may be taken with a spear or bow and arrow. Carp, buffalo and suckers may be taken in this manner, and there are no limits of any kind on these fish. No bodies of water have been set aside for spearfishermen, and there is no closed season on any fish species." J. W. Sizer, Information Officer, Information-Education Division, Arizona Game and Fish Department.

The 1956-57 fishing regulations . . . "Spearing, gigging, clubbing or shooting of fish is prohibited, except that rough fish (carp—buffalo—suckers) may be taken with bow and arrow or spear from the waters of Arizona. It is unlawful to take or attempt to take other species of fish in this manner. This method of taking rough fish may not be practiced within one-half (1/2) mile of any boat dock, swimming area, or other place where people are concentrated.

CALIFORNIA

No special spearfishing license is required, however, all fishermen must have an Angling License, (resident, \$3.00; non-resident, \$10.00; special 10-day non-resident, \$3.00; special 3 day citizen, ocean waters, \$1.00; non-citizen, \$10.00.)

In all ocean districts, fish, other than mollusks, crustaceans, trout, salmon or striped bass, that may be taken by other means, may be taken with spear by a person equipped with underwater goggles, face plates, breathing tubes or diving apparatus of the type commonly known as self-contained underwater breathing apparatus (Scuba), and completely submerged. This section does not authorize the taking of fish with spear by a person equipped with diving apparatus other than underwater-type goggles, face plates, breathing tubes or self-contained underwater breathing apparatus (Scuba). No person may use or possess any spear in ocean districts north of Ventura County within 100 yards of the mouth of any stream.

In all ocean districts south of Yankee Point, Monterey County, mollusks and crustaceans may be taken by the use of the hands or by devices less than 36 inches long, commonly known as abalone irons, in the manner

commonly known as skin diving or by the use of diving apparatus commonly known as self-contained underwater breathing apparatus (Scuba). No type of underwater artificial breathing device may be used in taking mollusks or crustaceans in any other districts. For the purpose of this regulation breathing tubes are not considered to be underwater artificial breathing devices.

Mollusks include all varieties of abalone, scallops, clams, mussels and cockles. Crustaceans include all varieties of lobsters and crabs.

Skates, rays and sharks, except soupfin sharks, may be speared or harpooned or taken with bow and arrow.

Millerton Lake, Fresno and Madera Counties, is the only inland water in which underwater spearfishing is legal. Carp may be taken with a spear in Millerton Lake, Fresno County. Spearfishermen must wear underwater goggles or face plate and be completely submerged.

Limits: Abalones, March 16 to January 14. Bag and possession limit: five per day. No red abalones less than seven inches in diameter; green less than six and one-quarter; pink less than six; black less than five, all other species six inches. All abalone fishermen must carry an accurate measuring device when taking abalones. Undersized abalones must be replaced on the surface from which taken without delay with the shell outward. Abalones not in the shell may not be transported, nor possessed, except when being prepared for immediate consumption. Spears and gaffs and devices longer than 36 inches prohibited in taking abalones.

Scallops: No closed season on rock scallops. Bag limit: 10. No size limit. Unlawful to take or possess any speckled (bay) scallops. No bag limit or closed season on any other scallops.

Lobsters: October 1 to March 15. Daily bag limit: 10. Size limit: none under 3/4 inches measured in straight line from rear edge of eye sockets to rear edge of body shell in front of flexible tail. Must be brought to shore in such condition that size may be determined. Lobster traps prohibited in Districts 19A, 19B, 21 and that portion of District 20 on northerly side of Catalina Island." (Source of information William M. Carah, Information Officer, Department of Fish and Game, and digest of 1957 Angling Regulations.)

CONNECTICUT

"Spearfishing is legal only in the marine district (which includes Long Island Sound). Spearfishing is illegal in the inland waters." William J. Jahoda, Chief, Education Division, State of Connecticut Board of Fisheries and Game.

"No special underwater license required and no restrictions of equipment. Those species of fish found in salt water except striped bass can be speared underwater." Reference State Board of Fisheries and Game.

COLORADO

Spearfishing in Colorado for rough fish has been legalized as of this year. A valid license is necessary. R. M. Scott.

DELAWARE

"We do not have any law whatsoever on underwater spearfishing." Board of Game and Fish Commissioners.

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LAWS AND REGULATIONS

Florida — Georgia — Idaho — Illinois
Iowa — Kansas — Kentucky — Louisiana
Maine — Maryland — Massachusetts

FLORIDA

"It is illegal to use a spear for the taking of fresh water fish in the State of Florida, except under strict permit issued by the Director under approval of the Florida Game and Fresh Water Fish Commission." Robert A. Dahne, Chief, Information and Education Division, Game and Fresh Water Fish Commission.

"No license is required for underwater spearfishing. In certain counties of the State some types of spearfishing equipment is regulated. At present any type of salt water fish may be spearfished. Size limits are the same as for sports or commercial fishing. Local county laws all over the state regulate the areas in which spearfishing may be done.

"The State Legislature meets in April of this year and since spearfishing in the State is a very controversial subject at the present time, we expect several laws to be enacted relating to spearfishing." John S. McColskey, Chief, License Division, Florida State Board of Conservation.

GEORGIA

"We do not have a law permitting underwater spearfishing. It is at this time illegal to take fish in any manner other than hook and line and netting. We are very interested in getting a law passed to permit underwater spearfishing in our state." Fred J. Dickson, Chief, Fish Management, State Game and Fish Commission.

IDAHO

"I wish to report that we do not have spearfishing regulations as such. The regulations now specify that game fish may be taken by hook and line only; non-game fish may be taken by bow and arrow (crossbows prohibited). Consequently, spearfishing by the method of skin diving would be out of the picture in Idaho for the time being." E. Kless Brown, Chief, Information & Education Division, Department of Fish and Game.

ILLINOIS

"It shall be unlawful to take any of the species of fish protected by this Act by means of pitchfork, bow and arrow or bow and arrow device, fish spear or gig, except that carp, buffalo, suckers, gar and dogfish may be taken by means of a pitchfork, bow and arrow or bow and arrow device, spear or gig. It shall be lawful to take the above mentioned species only between the dates of March 15th to October 15th, both inclusive and then only between the hours from sunrise to sunset.

It shall be unlawful to take any fish by means of a snare, spear, gig, treated grain, firearms of any kind, wire basket, wire seine or wire net or a jack or artificial light of any kind, except light used strictly for illumination purposes.

A fishing license is required in this state to engage in spearfishing, and any individual 16 years of age or over, is required to possess a license. The price of a resident fishing license which is necessary to engage in spearfishing in this State is \$1.00. Non-residents of the state may obtain an annual license for \$4.00 or a 10-day license for \$2.00. Also, under the provisions of our Fish Code, the landowners residing on, or tenants of farm lands, and their children actually residing on such land may fish in waters on such lands without being required to have a license.

These regulations are subject to amendment by the present session of our State

Legislature and any new laws enacted will become effective July 1, 1957." J. H. Fitzgerald, Chief, Division of Law Enforcement, Department of Conservation, and Game and Fish Codes.

IOWA

"In all waters of the state legally open to fishing it shall be permissible to take carp, buffalo, dogfish, gar, quillback and gizzard shad by the use of a spear or bow and arrow from the first day of May to and including the 31st day of October in each year between the hours of sunrise to sunset."

No special underwater spearfishing license is required; but equipment must be limited to arrow or spear type projectiles (no CO₂ powered guns). There are no limits to size or number of rough fish taken by underwater spearfishing. 1957 synopsis of Iowa Fishing Laws.

KANSAS

"Kansas Fish and Game laws state that the only legal methods of taking fish in Kansas waters are by rod or pole, lines, and baited fish hooks, and the taking of certain rough fish by bow and arrow. All other methods of fishing, which includes the use of gigs, spears, etc., are declared to be unlawful." Fred Warders, Assistant Director, Forestry, Fish and Game Commissions.

KENTUCKY

"The Commissioner of the Department of Fish and Wildlife Resources with the concurrence of the Department of Fish and Wildlife Resources Commission does hereby declare underwater spearing of rough fish and the underwater shooting of rough fish with a spear from a spring mechanical device to be legal throughout the year. This form of spearing to be known as Marine Spearing and all participants in this type of sport must be submerged in the water in which the spearing takes place. Only rough fish may be taken, and a current fishing license, resident or non-resident, whichever the case may be, is required with a daily creel limit of 15 fish. This regulation is made to apply only to that portion of Dale Hollow Lake that lies in Kentucky, that portion of Kentucky Lake that lies in Kentucky, Dewey Lake, Cumberland Lake and Herrington Lake." (Adapted into Kentucky Fishery Regulations on December 16, 1955.)

Resident license fees are \$2.00; non-resident, \$5.00; non-resident 10-day, \$2.00

LOUISIANA

"A special underwater spearfishing license is not needed in Louisiana and there is no age restriction on spearfishing by skin divers, but a regular fishing license is required. (Resident, \$1; 7-day non-resident, \$2; annual non-resident, \$5.)

"None of the equipment used in underwater spearfishing and skin diving is restricted in Louisiana.

"No freshwater game fish may be taken by spearfishing, but there is no restriction on the taking of salt water game fish of any kind. There is no restriction on the size limit of fish that may be taken by underwater spearfishing.

"All Louisiana's waters (both fresh and salt) are open to skin divers and spearfishermen and we have no seasons. Fishing of any and all kinds in Louisiana is permitted 365 days each year.

"The number of skin divers, of both sexes, is steadily increasing in this state, particularly in our own salt water Gulf Coast." Mel Washburn, Chief, Education and Publicity Division, Wild Life and Fisheries Commission.

MAINE

"No spearfishing permitted in inland waters." Chief Warden, Commission of Inland Fisheries and Game.

"There are no restrictions relative to spearfishing except that they must be the holder of licenses issued by this Department for the taking of various species of fish and shellfish." Ronald W. Green, Commissioner, Department of Sea and Shore Fisheries.

Several types of licenses listed in the Maine Sea and Shore Fisheries Laws and Regulations include: lobster and crab fishing \$5.00; resident sea moss \$2.00; scallop fishing \$5.00; commercial shellfish and marine worm \$3.00.

Regulations for taking lobsters by licensed diver (only after three years' continuous residence or one year if a veteran): "minimum length 3 1/2 inches; maximum length 5 inches, measured from rear of the eye socket along a line parallel to the center line of the body shell to the rear end of the body shell. No mutilation allowed in catching."

Clams: "quahogs or soft-shell clams less than 2 inches in the longest diameter, to the amount of more than 10 percent of any batch" are illegal. Regulations vary with counties for clams and oysters.

Atlantic salmon: "Closed season from 16th day of July to the 31st day of the following March, both days inclusive." Also weekly closed time as enumerated for striped bass. Bag limit two per day. Minimum size 14 inches.

Scallops: Closed season from 1st of April until 31st of October, inclusive.

Striped Bass: Weekly closed time of 48 hours beginning at sunrise on Saturday morning to sunrise of following Monday from 1st of April to 15th of July. No minimum size specified. Bag limit—6 per person per day.

MARYLAND

"It is unlawful to gig or spear fish in both tidal and nontidal waters of Maryland, hence spearfishing by skin divers or any others is outlawed. However, there is a bill pending in the Maryland legislature now in session that, if passed, and signed by the Governor will permit skin diving and spearing fish in TIDAL WATERS; it would, if passed, become effective June 1, 1957. It will still remain unlawful in nontidal waters." Talbot Denmead, Assistant Public Relations Director, Game and Inland Fish Commission.

MASSACHUSETTS

"Massachusetts law as it pertains to the skin diver. To take lobsters, one year residency is required. License fee is \$5.00 and a different license is required for each county. Minimum lobster length is 3-3/16 inches, measured from the rear of the eye socket along a line parallel to the center line of the body shell to the rear end of the body shell. No maximum size limitations. Town clerks of various towns should be contacted concerning clams and oysters. It is of course illegal to mutilate a lobster in catching it—in other words no spears. The only salt water fish prohibited to spearing is the striped bass." Don Lamont, Northeast Council of Skin Diving Clubs.

Additional laws listed in the General Laws

Michigan — Minnesota — Mississippi
Missouri — Montana — Nebraska
Nevada — New Hampshire — New Jersey
New Mexico — New York

LAWS AND REGULATIONS

Relating to Marine Fish and Fisheries, chapter 130 include an age limit of 17 years to obtain a lobster and edible crab license, except with parents' written consent.

"A non-resident citizen of the United States, temporarily residing or intending temporarily to reside in any coastal city or town, may in any year, obtain a license to take lobsters or edible crabs during June, July, August and September for consumption only by the licensee and his family."

Only male crabs may be taken. Closed season on the edible crabs is from December 1 to March 31, inclusive. Only adult scallops (those with a well-defined raised annual growth line) may be taken. Closed season is between April 1 and October 1. Limit, no more than a total of ten bushels, including shells, in one day. Laws on scallop season and limit may be temporarily modified by local city officers.

Size limit on quahaugs or soft-shelled clams is no less than two inches in longest diameter. Consult local authorities for laws regarding taking of herring and alewives. Minimum size on following fish: pollock, twelve inches; mackerel, six inches; squeteague, twelve inches; shad, fourteen inches; Atlantic salmon twelve inches.

MICHIGAN

"No special license required for spearfishing. Regular fishing license necessary (resident, annual, \$1.50; non-resident, annual, \$4.00; non-resident, 15-day, \$3.00).

Only conventional hand propelled spear may be used. Spear guns or other mechanical or gas operated devices may not be used. No special waters are set aside for spearfishing. Both inland and Great Lakes waters are open during seasons shown for the species listed in the fish law digest. (Consult conservation officers for species, size limit, and complete regulations on underwater spearfishing.)

Underwater spearing not permissible during seasons or waters open to spearing through the ice. Fisherman must remain on surface of ice." E. E. Tucker, Assistant Chief, Department of Conservation.

MINNESOTA

"An angling license is necessary to take fish of any kind. For a non-resident the cost of such individual license is \$4.00. There is no restriction as to age.

"I am quoting Commissioner Order No. 1452, Section 5 which gives you the regulations we have for underwater spearing. 'Any resident licensed to take fish by angling may also take carp and other rough fish by harpooning by the following methods—rubber powered gun, spring gun, compressed air or CO₂ gun, with a tethered or controlled harpoon with a line not to exceed 20 feet attached—during such seasons, at such times and in such waters and under such conditions as prescribed by the commissioner of conservation in Sections 1, 2, 3, and 4 above for the spearing of rough fish. The following restrictions shall apply however, to the use of any such harpooning equipment:

(a) No such equipment shall be used within 1,000 feet of an established swimming beach;

(b) Such equipment shall be discharged only from beneath the surface of the water and shall not be carried in a cocked position while out of the water; and

(c) The use of such equipment shall be permitted only while a person is swimming or submerged in the water."

The species of fish that may be speared underwater are only rough fish such as carp, buffalofish, dogfish, sheepshead, eelpout, garfish, perch, whitefish and tullibees. There is no limit as to the size or number of such rough fish that may be taken. All waters in the state are open for the taking of such rough fish by underwater spearfishermen from May 1 through February 15." A. H. Emme, Asst. Chief Warden, Bureau of Warden Service, Department of Conservation.

MISSISSIPPI

"Game fish may be taken only by hook and line with one or more hooks (including rod and reel and artificial bait) or by the use of a trot line or troll or dip net.

It is unlawful to take or kill game fish or fish of any species by gigging, shooting, muddying or by the use of lime, poison, explosive, electrical devices of any kind, wire baskets, slat baskets, fish traps or poisonous weeds or walnuts. Long bows may be used to take carp, buffalo, grinnel and gar throughout the year." (1956-1957 Digest of Sport Fishing Laws and Regulations).

MISSOURI

"Underwater spearfishing is not permitted. A gig or spear, and bow and arrow, including bow and spike, and an artificial light only above the surface of the water may be used to take non-game fish in all waters of the state between the hours of 12:00 noon and 12:00 midnight, from October 1 to December 31. No person while wading may use a gig, spear, or bow and arrow to take fish." James L. Bailey, Chief, Protection Section, Missouri Conservation Commission, and Wildlife Code of Missouri.

MONTANA

"Montana has a law prohibiting the use of fishing spears of any kind and at least for the present, this would directly affect underwater spearfishing. It is possible that the Fish and Game Commission will be able to work out details to include this sport in Montana, particularly with reference to carp and rough fish." W. K. Thompson, Chief, Information & Education Division.

NEBRASKA

"Spearfishing is not legal in this state with spear guns. Hand spears are legal on non-game fish (buffalo, carp, gar, minnow, quillback, sucker and squaw fish) from sunrise to sunset April 1 to December 1." Game Forestation and Parks Commission.

NEVADA

"Non-game fish may be taken in any waters with spear and/or bow and arrow during open season. It is unlawful to take game fish by spear and/or bow and arrow.

No restrictions are placed on any of the equipment used in underwater spearfishing and skin diving. Fishing license is not required. (Nevada Fishing Seasons and Regulations and Nevada Fish & Game Commission)

NEW HAMPSHIRE

"Underwater spearfishing is illegal in all waters of the State of New Hampshire." Bernard S. Cram, Chief of Law Enforcement, Fish and Game Department.

"Regulations for guidance of skin divers in New Hampshire coastal waters. There are no restrictions in New Hampshire coastal waters. There are no restrictions as to method of taking, season or limit, nor is a license required to take salt water fish off the coast of New Hampshire. However, striped bass must be at least 16 inches in length measured from apex of fork of tail

to farthest extremity of head. Also to take oysters or clams, a diver must be a resident of the state or a non-resident owning real estate therein and must possess a license. Oyster limit, one bushel per day; clams must be at least 2½ inches in length and the limit is one peck per day. There are also county regulations as to closed flats, etc. The taking of lobsters by skin diving methods in the state of New Hampshire coastal waters is **absolutely forbidden**." Don Lamont, Northeast Council of Skin Diving Clubs.

NEW JERSEY

"No underwater spearfishing license is required in the State of New Jersey. We restrict in New Jersey goggle fishing to the following methods of taking fish—by means of a spear, harpoon, dart, arrow or other missile hand held and hand propelled by the fisherman while he is completely submerged in the water.

We do not define the taking of a fish by species other than a regulation on the size and season on striped bass. Striped bass taken in this manner must be 18 inches in length, not more than 10 striped bass per day, during the season of March 1 through December 31 in each year. Goggle fishing is confined to the waters of the Atlantic Ocean, it is illegal in fresh water.

There is an effort to restrict spearfishing or goggle fishing to certain areas of the Atlantic Ocean for safety reasons as spearfishermen have been known to surface in the course of fishing boats traversing inland along the Atlantic Ocean." William P. Coffin, Chief Protector, Department of Conservation and Economic Development.

NEW MEXICO

"Spears, gigs and arrows, not driven by explosive, gas or air, may be used in taking non-game fish and bullfrogs in waters containing game fish." No special license is needed for spearfishing (resident, \$3.50; non-resident, 5-day, \$3.00; non-resident, \$8.00). Department of Game and Fish and Regulation No. 370.

NEW YORK

"Spear gun fishing per se is illegal except in our Marine District. Part 9 of Section 265 of the Conservation Law reads as follows:

"Spear guns. Except in the Marine District, spear guns and underwater guns, which mechanically propel a spear or harpoon, shall not be used to take fish."

This section of the law was passed by the Legislature and became effective July 1, 1956.

The prohibition of spear gun fishing, however, does not entirely outlaw underwater fishing, since hand spears may be legally used in designated waters for designated species of fish.

Anyone with a fishing license may use hand spears for spearing within the limits of our Spearfishing Order. For the species named which are eligible to be taken by spearing, no size limits are imposed. In the Marine District it is illegal to take striped bass less than 16 inches or fluke or summer flounder less than 14 inches in length by spear gun fishing." C. W. Greene, Chief, Bureau of Fish, Conservation Department.

"Fish must not be taken by use of spears within 50 rods of eel weirs.

Spears and long bows may be used from March 20 to November 30 unless otherwise specified, to take ling, lawyer or burbot, whitefish, mullet, carp, catfish, dogfish, bull-

(Continued on Next Page)

LAWS AND REGULATIONS

North Carolina — North Dakota — Ohio
Oklahoma — Oregon — Pennsylvania
Rhode Island — South Carolina
South Dakota — Tennessee — Texas

heads, suckers, garpike, eels, herring and sheephead, except as specifically prohibited. (Contact Conservation Department for prohibited areas.) Spearing Order for 1956."

NORTH CAROLINA

"We make no attempt to regulate the location of the fishermen in taking fish, whether the fisherman be above the water or under it. Our regulations pertain to permissible devices. Game fish may be taken only by hook and line fishing. Non-game fish, under certain circumstances, can be taken by other devices." J. H. Cornell, Chief, Fish Division, Wildlife Resources Commission.

"It shall be unlawful to take or attempt to take any fish by means of a spear, harpoon, gig or device similarly used, except that such device may be used to take non-game fish when the user thereof has obtained a Special Fishing License which will designate the waters and county in which and the times during which its use is permitted.

"Non-game fish may be taken, by special devices other than those listed in Regulation 3-56, Section a., in such designated waters and by such designated devices as the Executive Director of the Wildlife Resources Commission may specify, provided that each such special device shall be licensed as provided in Section d. of this Regulation. Such Special Fishing License (price \$50c, obtainable from county wildlife protector) shall name the waters in which the special device may be used, the county in which it is valid, and shall be effective only when the special device is used by the licensee under the supervision of the county wildlife protector or some person designated by him." 1957 Fishing Rules.

"This program is only designed to improve the game fish habitat where needed, and is not of general application across the state." Cornell.

NORTH DAKOTA

"We do not have any specific laws covering skin diving or spearfishing except that it is illegal to spear fish at any time in North Dakota." Dale L. Henegar, Chief, Fisheries Division, North Dakota Game and Fish Department.

OHIO

"Fishing for sheephead in the Lake Erie fishing district only: carp, quillback, suckers, dogfish, garfish, buffalohead, gizzard shad and goldfish through the state, is permitted by any method except it is unlawful to use more than two hand lines or more than two units of rod and line, or a combination of more than one hand line and one rod and line, or to use explosives, poisons, firearms, crossbows, electricity, chemicals, nets, seines or traps.

"Except as otherwise provided there is no closed season, no legal length, no bag or possession limit.

"Resident fishing license, \$2.00, fee 25c; annual non-resident license, \$5.00, fee 25c; temporary ten-day, non-resident license, \$3.00, fee 25c." E. L. Wickliff, Supervisor, Fish Management Section, Division of Wildlife, and 1957 Fishing Guide.

OKLAHOMA

"A fishing license is required of persons taking rough fish by means of gigs or spears and that the price for non-resident fishing license is \$5.00 annually and the 10-day non-resident trip license is \$2.25 and that non-residents who have not yet reached the age of 14 may fish without having a license.

"There are no restrictions on underwater

spearfishing or equipment except that gigs or spears must have not more than three points with no more than two barbs on each point and all species of Oklahoma fish not classified as game fish may be taken in this manner. There is no bag limit on rough fish.

"Non-game fish may be taken by means of gigs and spears in the following lakes and streams of Oklahoma:

"Grand Lake, Lake Texoma, Tenkiller Lake, Ft. Gibson Lake, Greenleaf Lake, Lake Murray, Lake Carl Blackwell, Lake Lugert, Hulah Lake, Lake Wister, Ft. Supply Lake, Canton Lake, Salt Plains Lake and Lake Heyburn, and all of the lakes, rivers and streams of Delaware and Mayes counties (except that area one-half mile south of the Grand River Dam in Mayes county), and that portion of Grand River, which lies between a point of 50 yards below the base of Ft. Gibson Dam and the mouth of Flowers Creek. The term "Lakes" being construed as meaning the main body, or the stationary waters of the above named lakes, and not including any tributaries, or parts of tributaries, flowing or running into said lakes." Claude Goin, Chief, Law Enforcement Division, Game and Fish Department.

OREGON

"Since spearfishing in Oregon is restricted to non-game fish for which a fishing license is not required in this state, spearfishermen do not need a license to indulge in that sport. There are no restrictions on the type of equipment; you couldn't spear for trout or salmon or the so-called spiny ray or warm water game fishes nor for sturgeon or shad or any of the fish that are by law classified as game fish or as food fish. Those that you could spear would include the so-called rough fish, such as carp, suckers, squawfish, chubs and so on. There would be no limits either as to number or size on these. We have no areas set aside for or restricted to spearfishermen." R. C. Holloway, Chief, Dept. of Information & Education, Oregon State Game Commission.

PENNSYLVANIA

"Spearfishing is not permitted. All other methods but angling are illegal except carp may be taken with bow and arrow." W. W. Britton, Chief Enforcement Officer, Pennsylvania Fish Commission.

RHODE ISLAND

"Rhode Island does not require a spearfishing license. Has no law regulating spearfishing in salt water. It is not possible to take fresh water fish except by hook and line." Thomas J. Wright, Chief, Division of Fish & Game, Department of Agriculture and Conservation.

SOUTH CAROLINA

"No underwater spearfishing license required but regular license for fresh water would be. No salt water license required residents or non-residents. None of the equipment used in underwater spearfishing and skin diving is restricted.

No fresh water game fish may be caught except with hook and line, which would prohibit taking of game fish with spears, arrows, etc. Fresh water non-game fish—carp, catfish, gar—could be taken but regular fishing license would be required—\$1.10 for residents and \$10.25 for non-residents. No restrictions in salt water.

Fish limits would not affect spearfishing, since in only waters with size limits they are bream, six inches; bass, 10 inches, and these

could not be taken by spearfishermen, being game fish.

All waters would be open at all times except for the prohibition on game fish in fresh waters." Eddie Finlay, South Carolina Wildlife Resources Commission.

SOUTH DAKOTA

"It shall be lawful to take suckers, redhorse, buffalo and carp with a spear without limit at any time during daylight hours in any of the public waters of the state, except trout streams, except in boundary waters between this state and bordering states where spearing of such fish is unlawful. No special license (state fishing license required) is required for the spearing of fish and there are no limits on this type of fish and people are not permitted to spear any of the game fish species." N.E. McEachron, Assistant Director, Department of Game, Fish and Parks.

TENNESSEE

"It is unlawful to take fish with a gig, bow and arrow or spear gun in any of the waters of the State except as provided below:

"Holders of valid sport fishing licenses are permitted to take non-game fish, except blue, channel, yellow and bullhead catfish, by "gigging", bow and arrow or spear gun during the months of April and May in certain waters under conditions provided below: Fort Loudon, South Holston, Wilbur, Daniel Boone and Watauga Lakes, not within 100 yards of the dams; Douglas, Norris Cherokee, Parksville (Ocoee No. 1), Ocoee No. 3, Davy Crockett, Burgess Falls, Great Falls (Rock Island) Lakes; Watts Bar, Chickamauga and Hales Bar Lakes, season April, May, June and July; Kentucky Lake and Pickwick Lake, only in Tennessee portion of lakes; streams and public waters lying west of Pickwick and Kentucky Lakes (this does not apply to state-owned and/or managed lakes, year-round season; Reelfoot Lake, season open entire year, only gar may be taken; Dale Hollow and Center Hill Lakes, tributaries open day and night during April and May, except (1) the tributary Caney Fork River is open day and night from its mouth up to Great Falls Dam, (2) the tributary Falling Water River is open day and night from its mouth up to Burgess Falls Dam." Fishing Regulations 1957.

A resident fishing license is required for persons 16 years or older. Fee is \$3.00. Non-resident license is charged at a fee similar to the home state non-resident's license or no less than \$5.00; three-day non-resident, \$1.50; ten-day non-resident, \$2.00.

TEXAS

"You will note that the legal means and methods for taking fish from the public fresh waters of this state are designated under the law as ordinary pole and line, set line, trotline, artificial lures and seines or nets of not less than three-inch square mesh and tidal waters, ordinary pole and line, casting rod, rod and reel, artificial bait, trotline, set line or cast net.

"You will note that spearfishing is permitted in the Colorado River Lakes above the city of Austin for the taking of rough fish. There are also a few local exceptions to the general law where a gig is permitted to take certain rough fishes from the public waters of this state. Otherwise, spearfishing or skin diving for the taking of fish is prohibited throughout the State of Texas.

"However, a bill has recently been sub-

Utah — Virginia — Vermont
Washington — West Virginia
Wisconsin — Wyoming

LAWS AND REGULATIONS

mitted and favorably acted upon by the Legislature now in session that will legalize the use of bow and arrow and spear gun for taking rough fishes from the public waters of this state. Public waters will include all fresh water public streams and the statutory limits of the tide waters." E. M. Sprott, Director of Law Enforcement, Game and Fish Commission.

This law is expected to become effective by September 1, 1957.

UTAH

"We have no specific license for spearfishing, however, our law states that anyone taking fish must procure a suitable license to do so. This license covers anyone using a spear or angling equipment to take fish.

To my knowledge, none of the equipment used in underwater spearfishing and skin diving is restricted in our state. There may, however, be an exception to this. Fish may not be taken with any device listed as firearms, which presumably means any object propelled by an explosion, such as rifle bullets or CO₂ propelled spears.

Carp, sucker and chubs may be taken by spears in this state. There are no limits as to the size or number of carp, suckers, mullets and chubs that may be taken in this state.

Waters listed and designated as year around angling are also open to taking of carp, sucker, mullet and chub with spears: Ashley Creek below Vernal-Diamond Mountain road bridge, Bear River in Utah below the Wyoming and Idaho state lines, Borham Lake, Colorado River, Cove River, Cutler Reservoir, Duchesne River below confluence with Strawberry River, East Fork Sevier River below Otter Creek Reservoir, Green River, Gunnison Bend Reservoir, Gunnison Reservoir, Hyrum Reservoir, Logan River below Mendon Bridge, Malad River, Minersville Reservoir, Mona Reservoir, Montez Reservoir, Otter Creek Reservoir, Piute Reservoir, Price River below Blue Cut near Helper, Redmond Lake, San Juan River, Sanpitch River below bridge south of Moroni, Sevier River below Piute Reservoir, Surplus Canal, Utah Lake, Venice Canal, Virgin River below Zion National Park, Wales Reservoir, Weber River and outlet canals below Weber-Davis diversion dam in Lower Weber Canyon, White River in Uintah County, Yuba Reservoir and waters east of highway #10 and tributary to Price River.

I might point out that the taking of non-game fish can be done by any method except by the use of firearms, explosives, chemicals or electrical devices." M. J. Madsen, Chief of Fisheries Division, Department of Fish and Game.

VIRGINIA

"Legal fishing in the inland waters in Virginia is only with a rod and reel, artificial lures or pole or line held in the hand, except for shad, herring and mullet and they may be taken with a dip net permit.

"However, spearfishing, skin diving or with bow and arrow is permitted in the salt water area. There is no restriction as to size and creel limit. To take fish with a bow and arrow a hunting license is required and there is no exemption as to age.

"I wish to advise you, however, that there is a bow and arrow season for taking carp in the Shenandoah Rivers in the Counties of Clarke, Page, Rockingham, Shenandoah and Warren during the daytime only during the month of May in any year." Webb Midyette,

Chief, Law Enforcement Division, Commission of Game and Inland Fisheries.

VERMONT

"While there are no laws in this State relative to skin divers spearing fish as such, we do have certain laws which permit the spearing of fish in certain waters.

"The time during which spearing is allowed in this State in certain waters is during that part of the year when we doubt that any skin divers would care to enter the waters by reason of it being so cold." C. J. Dowers, Chief Warden, Fish and Game Service.

"In Lake Champlain suckers, mullet and pickerel may be taken with the aid of a spear and jack from March 15 to May 15. Upon payment of a fee of \$1.00, the fish and game director may issue license to residents or owners or occupants of real estate in this state, to fish for catfish and horned pout as designated times and places, in such waters with set lines not to exceed one hundred feet in length. In Lake Champlain, pickerel not less than twelve inches in length may be taken by shooting and spearing from March 15 to May 15, except that such pickerel may be taken by spearing with the aid of a decoy from December 1 to March 15 by a person holding a hunting license.

"A person may take suckers during the month of April by a net or spear from the rapids of Little Otter Creek at Ferrisburg Center in the town of Ferrisburg.

"In Hinesburg Pond and Shelburne Pond pickerel not less than twelve inches in length may be taken by shooting and spearing from March 15 to May 15 by a person holding a hunting license."

WASHINGTON

GAME FISH

"Spearing of fresh water game fish is unlawful in this state, however, spearing of non-game fish such as carp and suckers is permissible. Non-game fish are not regulated, therefore, size and possession limits do not apply." Ernest E. Wolcott, Education Representative, Department of Game.

SHELLFISH AND MARINE FOOD FISH

"No license is required for this type of fishing for personal use. It is unlawful to do this type of fishing for commercial purposes."

"We do not have any restrictions on the equipment used while skin diving for food fish in this State. Our laws are very brief on this subject. You will notice that underwater fishing must be confined to the salt water areas of this state. It is unlawful to do this type of fishing in any of our fresh water lakes or streams.

"It is lawful to take any type of food fish by this method in the salt water areas except crabs and salmon."

"There is no special size on the food fish you can take. The daily bag limit is 20 lbs. and 1 fish. There is no special season; it is open the entire year."

"We have found that all of our contacts with the Puget Sound Mud Sharks in this area have been very favorable. If any member of this club gets out of line the club officers act immediately." S. P. Phillips, Assistant Supervisor of Patrol, Department of Fisheries.

Size and number: Clams: 24 razor clams; 3 geoduck; other varieties (including cockles, borers, mussels and freshwater clams) 20 pounds in the shell or 6 pounds of shelled

meat in the aggregate. Seasons and closed areas: razor clams, March 1 through October 15. After October 15, razor clams may be dug only on Saturday, Sundays and holidays. Geoducks, it is unlawful to dig geoduck clams on any beach between Alki Point and Dash Point except during June, July and August. Mussels, digging prohibited on all beaches from April 1 through October 31. Other clams, year-round open season except for the beaches west of Dungeness Spit, where digging is prohibited from April 1 through October 31.

Oysters: The limit is 36 whole oysters or 4 pints of shelled meat. Any manually operated device may be used to take oysters.

Scallops: No seasonal restrictions. They may be taken with any hand instrument. Limit: 12.

Crawfish: No seasonal restrictions. Fishermen are allowed to use either one hand dip net, one ring net, two shellfish pots or any hand instrument. Limit: 36.

Octopus: No seasonal restrictions. The fishing instrument used must not penetrate or mutilate the octopus. Limit: 20 pounds and one octopus.

Shrimp: It is lawful to take shrimp in all waters from April 1 through November 30, using either one hand dip net, one ring net, two shellfish pots or any hand-operated instrument. Limit: 10 pounds in the shell. Reference Washington State Marine Food Fish and Shellfish.

WEST VIRGINIA

"There are no laws governing spearfishing, due to the fact that there appears to be little interest in the sport in West Virginia." Carl J. Johnson, Director, State of West Virginia Conservation Commission.

WISCONSIN

"Present fishing regulations in Wisconsin do not require any special license for spearfishing in this state, resident license, \$1.00; non resident license, \$5.00.

"Skin diving: Panfish and rough fish may be taken by the method commonly known as skin diving by divers under the water with the use of spears or spear guns in the following waters: Crooked and Jordan lakes in Adams county; Lake Arbutus in Clark and Jackson counties; Lake Mendota in Dane county; Wolf and Helen lakes in Portage county; Lake Seven and Lake Ellen in Sheboygan county; Lake Geneva in Walworth county; Cyclone and Mathews lakes in Washburn county; Lake Five and Wallace lake in Washington county; Stratton and Spencer lakes in Waupaca county.

"Panfish includes white bass, yellow (striped) bass, rock bass, crappie, sunfish or bluegills, roach, perch, whitefish, and cisco. Continuous open season. Limit 25 per day. Sunfish includes bluegills and roach. There is no bag limit on white bass and yellow (striped) bass, rock bass, crappie, sunfish, bluegill, roach and perch in Lake Mendota in Dane county." Reference Walter J. Zelinske, Assistant Chief Warden, Conservation Department, and Wisconsin fishing regulations.

WYOMING

"The only legal means for taking game fish in Wyoming waters is with rod and line held in the hand with the usual bait or artificial lure. A new law makes it possible for archers to take fish with bow and arrow in waters open to public fishing." George W. Reynolds, Chief, Information & Education, Game and Fish Commission. ➤

PLAYA DEL REY, Calif.—Dr. Elleen Herbster suggests skin divers in the Bay District explore the ocean floor from Encinitas to Solana Beach in search of the treasure-laden ship of Francisco de Ulloa. Dr. Herbster, head of the Dept. of Ethnology of the San Luis Rey Historical Society, says that the society has a substantial budget to cover salvage of the ship that sunk in 1540 if the staff can be certain of its identity. If divers can locate the right hulk for the society they can be included in the profits from the salvage and may keep anything they find in their diving, according to the doctor. The *Trinidad* was carrying a fortune in silver and gold from the vaults of Madrid and Sevilla, Spain, when she sank.

SANTA CRUZ, Calif., April 22—Oscar J. Asturias, 39, Oakland, escaped death by one-quarter of an inch when he was shot by a rifleman. Asturias was skin diving at Davenport Landing about 200 yards offshore. The 22 caliber bullet would have hit the heart if it had struck one-quarter of an inch to the left. Asturias and his brother, Richard S. Asturias, were abalone diving when the shooting occurred. Both men wore rubber suits. The brother said he yelled at the two riflemen, but they walked away. Sheriff's officials said it was possible the riflemen mistook the skin divers for seals.

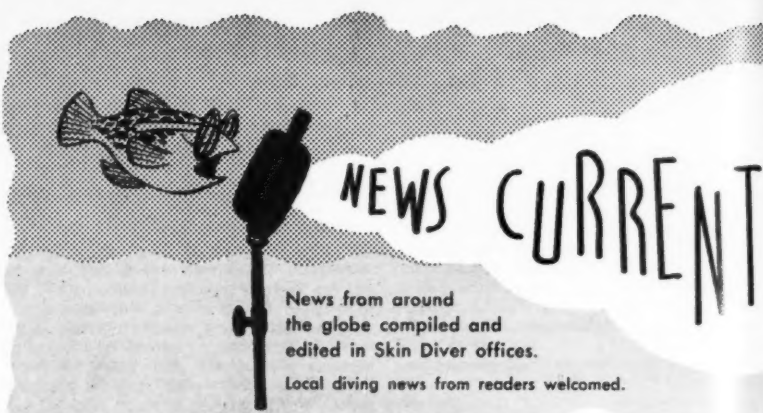
HARTFORD, Conn., May 9—Three skin divers were credited with saving the life of Enfield woman when she jumped 150 feet into the Connecticut River from the Charter Oak bridge. The trio, Vic Brewer, Lee Prettyman and Ralph Mercier, members of the Hartford YMCA Gillman Club, were called to the spot where the woman entered the water and pulled her to shore in a state of shock. Police said a note indicating marital difficulties had been left.

PETERSBURG, Va., April 29—A Union gunboat believed sunk in the spring of 1865 by Confederate artillery at Fort Clifton is being sought by three skin divers in the Appomattox River, halfway between Petersburg and Hopewell. The three, Pvt. Ray Hyde, E. J. Oglesby and Hans Krohne, salvaged an iron lug and bolt then had to discontinue their diving, but plan to explore the site again in the near future.

JOHANNESBURG, SOUTH AFRICA—The World's first "undersea safari" will be conducted along the coral reefs in the Mozambique Channel. The group hope to capture coelacanths and specimens just as rare as a haul of glittering, unique fish caught in the coral reefs off the coast of Portuguese, East Africa. The first catch of the tropical fish collectors ranged from multi-colored to drab, but were all rare collectors' pieces.

TOLEDO, OHIO, APRIL 27—A strong box containing \$20,000 in stocks and bonds was recovered from the Ottawa River by skin divers. A total of \$21,000 was stolen from an elderly couple and the strong box recovered following the confession of two suspects. Divers, Lee Merkle and Fred Pestner, found the strong box in ten feet of water.

WINTER HAVEN, FLORIDA—James R. Hardy, Winter Haven skin diver, aided in retrieving a \$22,000 bulldozer from its 14 foot watery grave. Hardy reported the 17 ton bulldozer was lying on its side, buried in two feet of mud. He dug a clearing around the base of the huge vehicle's tow bar for the attachment of a one and half inch steel cable. Cold weather and failing light halted the recovery after two hours' work, but operations were to resume the next day. A professional deep sea diver, with 160 pound rubber suit and helmet, made the descent to the bulldozer earlier, but limited visibility and the heavy gear restricted his activity.



SOUTH AFRICA, March 23—Team of salvage experts employing modern diving methods hope to recover some of the rich prizes hidden underwater off the coast of South Africa. Their main objective is the bullion and other valuables which went down with the *Star of Africa* 80 years ago near Simon's Bay in Cape Province. Many other wrecks off the African coast hold countless wealth in gold, jewels, silver and other salvage loot.

MANISTIQUE, Mich., March 28—Members of the Treasure Unlimited Skin Diving Club plan to dive for pennies—10,000 of them. The club volunteered to dive in Big Spring for the coins to be used to finance state parks. The divers told Conservation Commission members they saw money all over the bottom in exploratory dives, including silver dollars and half dollars.

MIAMI, Florida—Another first. A swimming pool has been added to the facilities of a Miami department store. Skin diving exhibitions, water ballet and swimsuit fashion shows will be featured at the pool.

GREENVILLE, Miss.—Skin diver from Greenville Air Force Base joined in the search for a 72-year-old hunting and fishing camp caretaker believed drowned in the Mississippi River.

MIAMI BEACH, Florida—Car rental agency provides car plus many extras, including skin diving equipment, boats, water skis, to Florida visitors.

POUGHKEEPSIE, N. Y., May 15—Dutchess Divers were commended by State Police Superintendent Francis S. McGarvey for their aid to the State Police in recent area accidents in body recovery.

WASHINGTON, D. C., May 9—Skin divers specially outfitted for marine archeology will try to uncover the ancient Palestinian seaport of Caesarea in the spring of 1958. Sponsored by the Smithsonian Institution and the American-Israel Society, the expedition will be under the direction of Edwin A. Link and his wife, Marion and Mendel L. Peterson, curator of Naval History at the Smithsonian. The Links made early exploration of the site last year, when they discovered a gigantic sea wall and large cut stone blocks that may have served as the foundation for a statue such as the celebrated Colossus of Rhodes. The expedition is believed to be the first in marine archeology.

MAITLAND, Australia, March—Police skin diver Detective K. Morris recovered a case

of imitation jewelry in Fishery Creek. The jewelry was allegedly stolen from a parked vehicle in Maitland.

PORT JEFFERSON, Conn., May 12—Connecticut Underwater Diving Association member, Jack Butterfield, 27, drowned during a voluntary search for a Sea Scout anchor lost a year ago in the Port Jefferson harbor.

SALEM, Mass., May 19—Two victims of an Armed Forces Day demonstration were recovered from their Coast Guard amphibian rescue plane by skin diver James Cahill, Beverly. The two men, Lt. Com. Albert P. Hartt Jr. and William J. Tarker, drowned when the plane sank in 30 feet of water. The four other crewmen climbed out of the plane and were rescued by helicopter.

SOUTH OLD BRIDGE, N. J., April 20—Volunteer skin divers are being sought by members of the South Old Bridge Community Center. The divers are needed to help clear underwater weeds from Duermal Lake, the site of a proposed recreation and swimming center.

KOMMETJIE, South Africa—South African naval frogmen took their first official deep sea operation with the laying of wave measuring apparatus on the sea bottom at Wit-sand, three miles from shore. The navy frogmen accompanied the apparatus as it was lowered to ensure that it was properly laid on the bottom and that the cable, through which electronic recording will pass to a recording hut on shore, was clear of obstructions.

AUGUSTA, Australia—Tom Snider continues salvage operations of the sunken liner *Pericles* despite turbulent water 100 feet below the surface. The wrecked liner went down in 1910 near Augusta and was discovered by Snider on January 17. Twenty-five tons of lead ingots, worth about 3000 pounds (approximately \$6000 U.S. dollars), have already been salvaged. He expects the job to take him two or three years.

WOBURN, Mass.—Forty-two sticks of dynamite were the loot sought by a skin diver in the quarry of the Winchester Crushed Stone Company. The search was called when two cases (48 sticks) of the explosive turned up missing following the rifling of the Crome Brothers dynamite storage magazine. Police found six of the sticks scattered on the ground around the pond, the rest are believed in the pond. However, police assure that the dynamite was not dangerous in the present state of isolation.

MELBOURNE, AUSTRALIA, APRIL 17—Homemade underwater breathing gear proved completely lethal in the death of **Brian David Lazarus** on January 9, according to **Dr. Peter Colville** of Melbourne's State Health Department. Colville said he had made a study of homemade equipment since a similar death last year and that the device used by Lazarus was completely lethal. He could not have remained conscious for longer than four minutes. An expert committee to investigate underwater breathing equipment has been formed by the National Safety Committee.

ALBANY, NEW YORK—The **Albany Skin Divers' Club** sponsored a skin diving exhibition at the **Watervliet Fish and Game Club** late in May as part of the **Young Sportsmen's Field Day**.

BOSTON, MASS.—Underwater films of the **Andrea Doria** were featured at the third annual skin diving clinic of the **Boston Sea Rovers** recently.

SPRINGFIELD, OREGON—Members of the **Emerald Aquaducks** swam down the **McKenzie River** during the annual **White Water Boat Parade**. Once the boats—and divers—reached **Leaburg Lake**, site of the celebration, scuba demonstrations were given by club members.

LOS ANGELES, CALIF.—Efforts are underway to set up safety codes or deep sea divers to prevent accidents following the death and severe injury to two divers recently. Three proposed regulations are being studied: decompression chambers on the job site, maximum dives of 100 feet in less than 24 hour periods, and a stand-by diver in case of trouble.

PORTLAND, OREGON—Skin diver **Bill Mau** breaks Oregon Coast official ling cod record of 19 pounds with his 31 pound, 42 inch cod speared in waters off **Barview jetty**.

LINDENHURST, L.I., N.Y.—The body of four-year-old boy was recovered from the bottom of a creek 75 feet from his home following a two-day search by hundreds of volunteers including skin divers of the **Long Island Frogmen's Club**. **Floyd Fanshaw** of the club located the boy's toy shovel at 8 p.m. and the body was recovered two hours later by boatmen.

BREMER BAY, AUSTRALIA—Seventeen-year-old **Arthur Taylor** of Bronte, New South Wales, had to pull part of his day's haul from jaws of a shark twice to capture top honors in the **Australian junior spearfishing championship**. Taylor also encountered two other sharks and was playfully nudged by a seal during his six hour stay in the turbulent water.

SAN DIEGO, CALIF.—Divers and skippers both may lose their permits in the ruckus between the two at the **Coronado Islands**. **Mexican Fishing Commissioner Fernando Najar Ruiz** says skin divers who violate sport boat chum lines and skippers who threaten skin divers with guns will have their fishing permits lifted and the skippers will be reported to **Mexico City** where sportfishing boats are licensed.

ELIZABETH, N.J.—Eleven skin divers of the **Mermen Diving Club** have been organized as an underwater rescue squad for the **Elizabeth Civil Defense**. The CD frogmen will help police search for weapons underwater as well as assist in drowning cases and disasters.

NEW YORK & FLORIDA—Members of the **Florida Highway Patrol** and thirty members of the **Nassau (N.Y.) Police Department** have completed skin diving scuba diving training. The **New York** group plan to use their ma-

rine division for recovery work. The **Florida** patrolmen also have among their police duties, fish and game protection. Their underwater schooling will help them detect fish-traps and nets and recover guns illegal hunters toss into the water when they are surrounded.

CAPETOWN, SOUTH AFRICA—One of the **South African Navy's** ten-man team of frogmen, **Warrant Officer O. Mathel**, was helped to a dramatic escape by his companion **Petty Officer Geoff Aitken-Smith** when his face mask filled with water at 170 feet in the **Atlantic off Kommetjie**. In the escape the two men set a free diving record for **South Africa**. While helping lay electronic equipment on the sea bottom Mathel's mask became flooded and he was unable to clear it. Mathel was guided to the top by his companion.

MARIETTA, GA.—Aircraft engineers **John L. Peters** and **G. H. Christensen** go skin diving in the "stratosphere" when checking the **Air Force** propjet transport **C-130 Hercules** for possible leaks in the pressurized fuselage. The transport is immersed in a huge tank where the water's pressure simulates air pressure under high altitude flight conditions.

NEW ORLEANS, LA., APRIL 18—Skin divers tried to reach six men entombed in cramped sleeping quarters of a capsized oil drilling barge. Six others of the crew were saved when the barge carrying a 100-foot drilling rig on its deck turned over during a storm in the mouth of the **Mississippi River**.

TARRYTOWN, N.Y.—**Dutchess County Divers Association** members were to attempt to recover scattered parts from an airplane that crashed into **Tappan Zee Bridge** in the **Hudson River**. Two men were killed in the plane crash.

LONG BEACH, CALIF.—**William Hogan**, **Phil Jackson**, **John Gaffney** and **Doug Stanley** plan to obtain underwater color movies of the gray whale in another expedition to **Scammon's Lagoon**, some 400 miles south of **Ensenada, Mexico**. **Dr. Paul Dudley White** visited this lagoon to record the whale's heartbeat. The **Long Beach** group planned their expedition because physiologists believe that observations of the whales may lead to advances in the knowledge of comparative anatomy.

NANTUCKET ISLAND, MASS.—**Peter Gimbel** plans to make a second attempt to examine the interior of the **Andrea Doria** within the next three months. The 29 million dollar liner is resting in 250 feet of water after its collision with the **Swedish liner Stockholm** last July. Gimbel's first three dives allowed only a brief investigation of the liner shortly after the tragedy that claimed 50 lives.

EAST WHITTIER, CALIF.—**Calhi High School** has received a 2000 year old **Roman** amphora. The ancient hard-baked pottery jug was recovered by **Stanley Slotkin** during a skin diving adventure in the **Mediterranean**. Slotkin awarded the amphora to **Mrs. La Verne Hill**, **California High School PTA** president, as the winner of a letter writing contest. Mrs. Hill in turn donated the ancient relic to the **Calhi Latin Club**.

FLORIDA SILVER SPRINGS, FLORIDA—Water rushing out of a cave of **Florida's Silver Springs** at 808 cubic feet a second ripped off **Ricou Browning's** mask and scuba unit suddenly and distorted his face like that of a jet pilot in a supersonic dive.

MIAMI, FLORIDA—Former Navy diver **Jack Crevalle** set a new underwater endur-

ance record of 28 hours, 53 minutes. **Crevalle** broke the old record in a 15' foot tank in **Miami's Seaquarium**, by one hour and eight minutes. **Lucien Plante** claimed the world's record with his underwater stay of 27 hours, 44 minutes, 55 seconds made at the **Montreal Sportsman's Show**.

SAN DIEGO, CALIF.—Skin diving biologists with the **Texas Fish and Game Commission** have discovered that tapping two rocks together underwater attracts fish. . . **San Diego** divers attract black sea bass by croaking and yellowtail by flashing the palms of their hands like fast traveling bait fish.

TEXAS—**Texas Fish and Game Commission** recently concluded a federal aid fishery study which tends to support recent **Michigan** studies. Skin divers report that surface noises apparently have little effect on fish at depths of over ten feet. The **Michigan** studies that revealed outboard motors didn't scare fish were under the supervision of **Dr. Karl Lagerler**, **University of Michigan**.

PANAMA CITY, FLORIDA—**Florida's Game and Fresh Water Fish Commission** now has a team of highly mobile, well-trained skin divers stationed in the northwest region. The underwater officers will aid in recovery of lost property, assist at scenes of water accidents and be used by fishery biologists as an aid to study various aquatic life.

SARASOTA COUNTY, FLORIDA—A bill to prohibit spearfishing within 100 yards of a bridge, wharf or public beach and other structures was one of twenty bills to be presented to county commissioners.

TALLAHASSEE, FLORIDA—The governor's veto of two bills of the 1955 session relating to fishing in area counties was sustained by the **House**. One of the bills would have prohibited spearfishing and possession of spearfishing equipment in **Wakulla** county.

MACKAY, AUSTRALIA—A handful of trochus shells shoved into the gaping mouth of a 13-foot hammerhead shark is credited with saving the life of **Thursday Island** skin diver **Farley Manantan**, 39. While the shark chewed on the shells, Manantan surfaced and jumped into a dinghy. The **Australian** was diving in four fathoms at the **Swain reefs** on the **Great Barrier Reef**.

CHELAN, WASHINGTON—Three skin divers were posted at key spots around the course of the **Apple Cup** hydroplane race on **Lake Chelan** May 5 in event of an accident. **Harry M. Woods**, **Spokane** official of the **American Power Boat Association**, explained that if a racer should go under at 125 miles an hour, the driver might be 80 feet underwater before he could get clear of his craft.

NEWCASTLE, AUSTRALIA—**Leonard Higgins** was mauled by a huge shark, turned loose and swam unaided to shore from where he was rushed to a **Newcastle** hospital. The 28-year-old man was fishing in about 30 feet of water near **Yakaba Head, Tea Gardens**, when he was attacked from behind by the shark, identified as either a blue whaler or a tiger shark. The top jaw marks of the shark extended across both thighs and tore away the flesh for 18 inches.

SAN DIEGO, CALIF.—Eighteen-year-old **Margot Hatcher** is the only woman ever to hold an active diver's permit from **Scripps Institution of Oceanography**. She worked for Scripps in the summer of 1955 and took its scuba course. She is the daughter of a former navy swimming coach. Her mother trained for the Olympics.



PHOTO BY DONN GAYNOR

Ohio Divers Graduate From Scuba School

Pictured above is a group of Scuba Divers from the Mansfield Scuba Diving School receiving their diplomas from Richland County Sheriff E. P. "Doggie" Long at Greter's Lake while the temperatures hovered in the low 40's. All the men pictured above are members of the recently formed Tri-County Body Recovery Association. Pictured in the water from left to right are Bill Rodgers, Bob Powell, Frank Kaiser, Brooks Yhaney, School's owner and Instructor Gene Florence, and Dick Bly receiving his diploma. Standing on dock is Bill Musur and Dr. Edward Beilstein. Kneeling are Carl Harris and Don Hartman.

These men now know how to dive safely and properly. They know diving danger signals, dangerous situations a diver could encounter, how and what to avoid when diving. They know how to figure the PSI they will be subjected to in their diving and what effect it will and could have on them.

They have been taught breath control. They can put on or take off any piece of their equipment underwater safely. They have an understanding and a respect for the diving diseases, what causes them, and how to avoid them. They know search patterns. They know some underwater signs. They know diver-to-tender signals as well as tender-to-diver signals. They have had instruction in Body Recovery so that they will be of service to their community in case of emergencies such as drownings, lost articles in the water, etc. These men will also be the nucleus of a Diving Club for Mansfield families now being organized. Their Instructor, Gene Florence, of 513 Rembrandt St., Mansfield, Ohio, will serve as Safety Director. Mr.

Florence started diving soon after he enlisted in the Navy in 1942. He was assigned to the Deep Sea Diving School at Washington, D.C., Navy Yard. He was graduated from there in the early part of 1944, and was assigned to Salvage Work aboard a ship. Later on he instructed Diving for Amphibious Salvage Operations at Fort Pierce, Florida.

Asked what dives he remembers best, he will tell you about an Army tank that went off a bridge in Florida with six soldiers inside it. He recovered the bodies and the tank. Then there was the airplane from the Mayport Air Base that gave him quite a bit of trouble before he recovered it. His most recent job was a car and two small children that went in a local lake. This was where he got the idea to train divers in Body Recovery. So with the help of the Fire Chief, Sheriff and State Patrol, he was granted permission to train divers for Body Recovery, etc. at local lakes. He has trained a number of men this winter at the YMCA, not only in the use of Scuba but also in recovery work for the Tri-County Body Recovery Association. He is planning a large training program of Scuba Diving this summer along with his duties as Safety Director of Mansfield Diving Clubs.

Anyone wishing to register for his diving classes can do so at any local sporting goods store, or they can call or write to him at his home at 513 Rembrandt Street, Mansfield, Ohio. Or if you are in this area, phone 3329-4 and he will be happy to answer any questions about his school or diving equipment or just plain diving that his 14 years of experience will allow.

At a meeting May 16, 1957, a com-

WOMEN'S SPEARFISHING COMPETITION

In recent months 2,000 copies of the A.A.U. approved rules governing the first women's underwater spearfishing competitions were mailed out to individual diving clubs throughout the United States and Hawaii. We know you have received your copy, however, if you did miss yours, we will be happy to send you a duplicate.

Teams are to consist of two women divers and each individual club may enter as many teams as they choose. For copies of the rules or additional information, write to Miss Kate Miller, Committee Chairman, 3001 Stanford Street, Venice, California. The minimum age limit for the contestants is 16.

This is the first women's competition to be sanctioned by the A.A.U. and is to be held in Laguna Beach, California, on July 21, at the same time and place as the Men's Pacific Coast Championships. The Laguna Beach Junior Chamber of Commerce will also stage the "Miss Mermaid" beauty contest in the staging area of the dual competitions.

Women divers are urged to help make a huge success of this long cherished dream. Actually, there are very few women diving enthusiasts compared to men and your girls need not be "top divers" to enter—none of us are, but it should be fun and quite rewarding to be a part in the pioneering of this women's competition. Four years of hard work have been spent in working out details, comprising rules, contacting people, publicizing, and having final A.A.U. sanction to go ahead. Applications will be accepted up to competition time, however it will be greatly appreciated if your applications be in at least a week prior to July 21.

mittee representing the Tri-County Body Recovery Association set July 21, 1957 as the date for their Field Day. This event is to show state and local officials as well as the community the service a well organized and trained group of men and divers can give their community in case of an emergency. Gene Florence, the Diving Instructor of the Association, was given the job of directing all diving operations at the Field Day and Emergencies. Needed officials have cooperated and granted the use of the Clear Fork Reservoir for the demonstrations. Local fire departments, highway patrols, sheriff's offices and police will participate. All have been trained to tend divers from top side and direct their search patterns. The public is invited.

SUGGESTIONS ON SURVEYS FOR UNDERWATER RECREATION AREAS

By Conrad Limbaugh

The urgent need for underwater recreation areas is obvious to those who have followed the precipitous growth of skin diving in the United States. The growth in number of skin divers in Southern California has risen from fewer than 1,000 in 1946 to 61,000 in 1954 to 200,000 in 1957, and the growth of the sport has been similar in other parts of the country during the past 3 years. There are approximately 500,000 skin divers at present and conservative estimates suggest that we may have between 3 and 7 million divers by 1965. Skin diving is an all-year sport existing in all coastal regions and many inland waters.

The purpose of setting aside parks would be to provide healthy outdoor activity for our citizens; to protect undersea life and natural beauty; to acquaint the general public with a new and fascinating frontier. In addition, protected areas should be available for scientific studies and as reservoirs of fishes and other organisms which may be over-fished in unprotected areas.

Contrary to popular belief, the areas propitious for skin diving are not extensive. Skin diving is concentrated in specific areas, usually on shallow reefs surrounded by clear and relatively warm waters. Diving is almost entirely restricted to the threadlike margin of the sea (and some lakes). Again, contrary to popular belief, the ocean does not contain an inexhaustible supply of each marine organism. Many organisms are quite restricted, some to particular islands, points, or stretches of coasts. All have specific depth limits and temperature requirements.

Many marine organisms, such as coral, are sessile and slow growing. Their destruction in shallow waters may destroy the beauty of a particular reef for many years.

Underwater park sites should be very carefully selected. The parks should be provided with special facilities and information. Rules to protect the skin diver, the park, and its natural inhabitants will need to be formulated and

enforced. Preliminary research will be required to set up a sound primary program. The results of this study would be modified by additional experience and continued research.

The primary study plan should include a biological, oceanographic and geological survey, topographic and ecological mapping of the underwater area, emphasizing points of spectacular interest or beauty, and a survey of man-made and natural facilities available for the comfort and safety of park visitors.

The marine hazards of this particular area should be listed and specific recommendations made on how to avoid and treat them, as a basis for park rules and suggestions. The general categories should include waves and currents, harmful and irritating organisms, boating and swimming, diving physiology and equipment problems.

In the course of the survey, it will be desirable to map and mark areas of particular interest, and to include in a final report an account of the habits and habitats of the more abundant and spectacular organisms.

The marine world should be available to both swimmers and nonswimmers. Swimmers will need rental equipment, including fins, face plates, floats, weights, self-contained underwater breathing apparatus and boats. Non-swimmers will need directions to intertidal areas of specific interest, look boxes for viewing underwater from skiffs, and glass-bottom boats.

In the study of existing facilities, attention should be paid to launching areas, water supply, protection from insects, weather, etc. In addition, such factors as seasonal temperature, turbidity and salinity of the sea should be recorded.

The complete results of this study should be summed up in a final report with specific recommendations, emphasizing methods of conservation. The final report should consider possibilities of aquaria, museums, movies, and publications, all of which could enhance the value of the park for the general public. ➤

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SURVIVAL

(Continued from Page 21)



and the false start of his first trip across the Atlantic, the doctor tried to drink various dilutions of sea water to stretch the supply of fresh water. The result—swollen feet and legs up to the knees within 24 hours. Decidedly impractical, he discovered.

The second, which became almost a Yogi theory with the serious deep-thinking Lindemann, evolved after a disastrous climax to the start on his earlier trip, a catastrophe of sleep drunkenness that almost ended his career as well.

Fatigue drunkenness caught up with him shortly after leaving Liberia. He threw vital supplies and instruments out of his dugout canoe. But fortunately, sleep caught up with him and he and his canoe drifted aimlessly. When he awoke, considerably refreshed after unknown hours of sleep, he decided he had had it, and headed for shore. He shipped the canoe to Oporto, Portugal; studied the sleep drunkenness phenomenon, and experimented further with it during his trip to Haiti.

In this boat he could lie down and stretch a bit. He had considerable supplies, though certainly mighty meager by comparison with the weekend chow for the average spearfisherman's party. The results of the first trip were published in Germany in a book entitled: "In a Dugout Canoe Over the Sea" (Im Einbaum Ubers Meer). One third of the book was devoted to a study of Liberia and one third to Haiti. Only the middle chapters contained his memos on his voyage.

But the first voyage laid the groundwork for an intense psychological preparation for the second. This time he was determined to whip sleep drunkenness with his new theory—that he could dominate his mind with self-imposed hypnotic-like orders, which were simple and concise: "Never give up! Course West! Accept no assistance!" They worked.

He never gave up, although it was extremely difficult after two capsizings in a row. His two rubber ballast bags, normally filled with seawater, had broken and were empty. In the first capsizing he lost part of his precious condensed milk supply, his sextant, trident, cameras, various other supplies, and

(Continued on Next Page)

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drowned his chronometer. He could no longer navigate, but drifted by dead reckoning with the fortunate assist of the Northeast Trade Winds, those wonderful, normally steady winds that blow into the Caribbean. Dr. Lindemann was exhausted by the second capsize, but managed to right his boat and sailed on. The last three weeks were a hellish maelstrom of stormy seas.

He maintained course West and landed just about where he has expected to land.

He accepted no help. Twice merchant ships came alongside in Mid-Atlantic and asked if he needed assistance. He waved them off.

Toward the end of the journey, in the stiff seas and storms, he cat-napped. Incidentally, he had intentionally picked the most uncomfortable craft he could find. It was so cramped he could neither lie down nor stand up. He sat all the way. He wanted hypnosis to take the place of sleep, but in those weeks toward the end he was unable to do so.

"I had hallucinations at night," he said. "I heard voices and music. I was out of my head, but in the morning, when the sun came up, all this would disappear. It would be another day on the same water."

He disproved another theory—that continued submersion in sea water was damaging to the skin. Dr. Lindemann sat in a puddle or half-full boat for almost all of the 76 days. There was absolutely no discomfort, no lesions, no softened skin, even after he stumbled out of the foldboat on the dock at St. Thomas, unable to walk unassisted from the two and a half months of constant sitting. Andre Dachary, a fellow spearfisherman, so to speak, and head of a spearfisherman's cruise agency in St. Thomas, was one of those who helped the doctor ashore.

Hannes Lindemann's home is near Hamburg, Germany. He says he has been sailing all of his life. As a small boy he sailed Klepperbots—light craft 16 feet long, 30 inches wide and one foot deep, and propelled by sail or paddle. The young Lindemann almost always preferred to paddle.

During the war he served as an infantryman in the German Army. He was invalided home after being badly wounded on the Russian Front. Recovering from his "souvenir" as he calls it, he began studying medicine. He was more interested in teaching sports than practicing medicine, but after graduation he practiced six years in hospitals,

three of which were in African backcountry. One year was spent in North Africa and two were passed in the Liberian Rain Forest. During those latter years his plans built up to the two solitary voyages.

The doctor regained his ten pounds of lost weight and much of his strength in two weeks of rest at St. Thomas. When not occupied with the work of cleaning up and stowing his boat, and interviews, he wrote furiously to complete notes for his forthcoming papers, thesis and book on survival. He accepted an invitation of the University of Rochester, New York, which has a section in the medical school devoted to survival, to use their facilities, where he is presently putting his notes in order.

Few pioneers have subjected themselves so deliberately to self-imposed suffering and possible death to prove their points. It is expected that Dr. Lindemann's observations may result in some sharp changes in aircraft survival kits in the armed forces and perhaps a lessened fear of being cast adrift from sinking ships, at least in tropical waters. Dr. Lindemann believes that if a few lives are saved in the future as result of his observations, the harrowing experiments he made were worth the effort.

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NEW CALEDONIA HOLDS 1957 UNDERSEA CHAMPIONSHIPS

By HENRI DALY

To better inform your many readers on what goes on in our small island, we are sending the results obtained in the two official competitions for the 1957 season which has just closed.

The Champion contest (exclusively

reserved to hunters utilizing the Champion gun) on March 3 gathered 29 contestants who brought back a total load of 3524½ kilograms of fish. The victorious team was the group "Dorades" with 367½ kilograms.



P. Weiss, received the Bertrand Germain trophy (prize for the largest individual catch) with his catch: a turtle weighing 160 Kgs. Pic by Limousin.



One "Napoleon" of 35 Kgs. caught during the Caledonian championships.

The Caledonian Championship was held April 14 and 33 contestants brought back a total load of 4782-3/10 kilograms. Winners were the "Moponous" with 442 kilograms. Individual champion was R. Borri with 210½ kilograms.

The Bertrand Germain trophy, truly the "blue ribbon" of submarine hunting (dedicated to the memory of one of our best hunters, who recently died in an accident) was awarded to P. Weiss, who alone captured a turtle weighing 160 kilograms.

As you can well observe, our results are not bad, but we must confess that New Caledonia is, quoting Marcel Is-Schwart, hunter and underwater explorer and a great friend of Gustav Dalla Valle, "truly a haven for sirens". In effect, our island is in the form of a cigar, 450 kilometers long and 50 kilometers wide, situated about 860 miles E-NE of Sydney, is protected in all its contour by a coral belt which encloses a lagoon with calm and clear water, populated by an incredible multitude of fish. The principal "victims" of undersea hunters are:

The loches (red grouper-rock hind-spotted jewfish). The oui-ouas (Bermuda chub), the picots (bronze tang surgeon fish), the zebrazomas (sailfin tang), the perroquets (blue and purple parrotfish), the vieilles (dog snapper), the balistes (common trigger fish), the becunes and the carangues (barracuda and jack). The requins are abundant, but with a little experience and much prudence. . . .

In regard to the undersea bottoms, they are very beautiful and are suited admirably for cinematography, especially the East Coast which is less populated by fish. Submarine hunting here is practiced from November to May, approximately seven months. >>>

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BODY RECOVERY

(Continued from Page 17)

diffused and the diver's only tangible connection to the world above is the anchor line, sliding through his hand. Further down, the divers look at their depth gauges—150 feet. The diver's world is now a twilight, to which his eyes become gradually accustomed. At 185 feet, the bottom can be seen 25 feet below. A few more kicks and they are on the bottom.

The bottom is a fine, gray sand with empty shells of Gaper Clams scattered about. Delicate sea pens, a distant relation to the jelly fish, look like opaque glass feathers sticking out of the sand. The divers' eyes become accustomed to the dusky twilight. Sixty feet away, the silhouette of the airplane begins to take shape. It is stuck, nose down, in the sand at about an 80 degree angle. As they swim closer, they can see that the wings are sheared off about 2 to 3 feet from the fuselage. Pieces of the airplane's skin and canopy are missing, as well as the cowl around the engine.

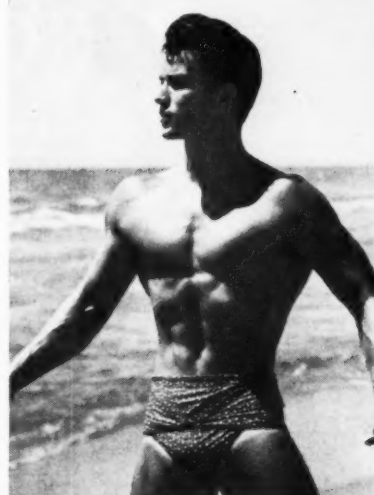
The pilot is hunched forward, his arms extended in front of him. The wind shield in front of him is also gone.

Parks stops and takes one picture. As the flash bulb goes off, both divers are temporarily blinded. The numbing effect of nitrogen narcosis causes them to work slowly, as their reactions are slightly inhibited. With one diver on either side, Tyner and Parks attempt to pull the pilot free, but he is stuck fast. Parks reaches down and fumbles for the pilot's waist strap release. He pulls it, and the body lifts easily from the battered cockpit. The divers lower him to the ocean floor, and Tyner secures a line around and under his shoulders. Three tugs on the line and the body is raised to the surface by the crew on the "Baywatch".

Tyner and Parks make their way back to the anchor. They have already been down over thirteen minutes. On their way back to the anchor, they pass a twisted piece of the abandoned aircraft. They move up the line, slowly to nearly a crawl at 50 feet. The divers stop at the twenty foot decompression stage and check to see if each other feels okay. They are hauled on up to 10 feet and left there for 35 minutes. During this time, Tyner and Parks begin to feel the chill of the water, and the mental and physical fatigue that follows a deep dive.

They come to the surface. Their gear is removed. They are put ashore at the Marineland Pier, and taken home, where they will sleep for several hours after a warm shower. The body of the pilot, Jerry Dowdy, has been gently hoisted up and taken ashore for a proper burial.

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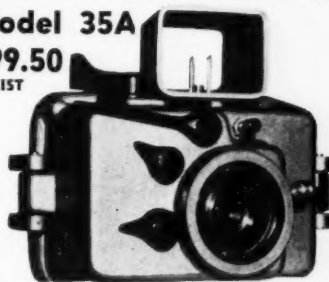
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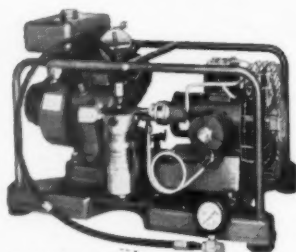


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CONNECTICUT COUNCIL OF DIVING CLUBS

By **PAUL D. SCHMANSKA**

A wrap-up of plans for the summer topped the business of The Connecticut Council's April meeting. Council-sponsored activities are four spearfishing meets: June 2 at the Housatonic Breakwater in Stratford, near Bridgeport; July and August, Stonington and Norwalk; with a final test in September at a location still to be selected.

Nine-man groups represent each Council member club in each of the first three meets. In these meets, the men will gather points on the basis of fish taken, using a rather complex scoring system.

The top three men in the meets will be designated the Council team, to represent Connecticut in inter-State competition. The number one man will be the Council Diver of the Year.

The September meet will bring together the three highest rated club teams to determine the Council championship team.

Two more Connecticut skin diving clubs signified their intention to join the Council. One is New Haven's Anthro-Piscatorial Society and the other is Danbury's Western Connecticut Skin Divers. They will join the Connecticut Sea Devils and the Associated Skin Divers of Hartford, the Connecticut Underwater Diving Association of Bridgeport, the Norwescons of Torrington, the Norwalk YMCA club, and the Greenwich group.

We'd like to hear from other Nutmeg State skin diving organizations. Drop a line to Jack Shaughnessey at the Norwalk YMCA.

Will Jacobs, Council Representative, and I, attended the May meeting of the Connecticut League of Sportsmen's Clubs. The invitation was extended to us because the Council has applied for membership and the group wanted to ask us some questions. Although the League is organized on a county basis, it plans to rewrite its by-laws so the Council can become a member organization at the state level.

The League works closely with the State Fish and Game Department, and is particularly effective in its dealings with the General Assembly, the Connecticut legislative body.

WHAT, NO SPEARS?

By **CHUCK OVERFELT**

An informal meet sponsored by the Pacific Grove Looney Gooneys and sparked by the bounding enthusiasm of Dee Marsh, Chairman of our New Ideas department, drew the largest crowd of the year to the sunny Carmel Meadows area Sunday, May 5th.

Presently the Cen-Cal Championships are the only occasion when all the clubs get together and we felt that more opportunities should be presented to the various clubs to get acquainted with each other. Especially those groups whose main interests are other than spearfishing.

Dee contacted the clubs in the Cen-Cal area and the response was very favorable. All clubs entering were asked to donate a prize and the Looney Gooneys provided a cup and plaque. A treasure trove of knives, masks, repair kits, depth gauges, spear heads, books, snorkels, and merchandise orders were on display.

Spearfishing was ruled out of this meet and there were only two events: a treasure hunt, and a contest for the

largest abalone. The ab hunt lasted one hour and each diver was allowed only one ab. Prior to the treasure hunt, approximately 300 discs the size of 50c pieces were scattered through the kelp beds and rocks. Prizes were to be awarded to those who found the most discs.

Fifty-two divers from eleven clubs registered for the ab hunt and entered the water at the signals. Then the large gallery got an unexpected laugh. Seconds after the group entered the water with their floats, a huge breaker came roaring in and deposited most of the entrants right back on the beach.

The one hour limit proved discouraging for many divers who were unfamiliar with the area and one contestant lost his catch while trying to get through the surf which had been steadily rising.

When the red flag was posted and the calipers and rules brought out, one fact was re-remembered. Objects underwater seem much larger than when brought to the surface. Ray Miser of the Urchins wasn't deceived and received the cup for the big one. His abalone measured 9-13/16 inches. The club award for the three largest also went to the Urchins.

The heavy surf made it difficult for the treasure hunters and in the hour and a half allotted to the event, 134

discs were recovered. First prize went to Dick Reynolds of the Urchins. There were enough prizes that even those who found only one disc were rewarded for their efforts.

Clubs entered in the meet were: Pacific Grove Looney Gooneys, Northern California Skin Divers, Urchins, Royal Dolphins, Oakland Eels, Marin Skin Divers, Cormorants, Sea Lions, Golden Gate Aqua Knights, San Jose Barbs, and the Carmel Bathing Assoc.

We Looney Gooneys wish to thank all of you who participated and hope that you found our efforts worth your while.

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EMPIRE STATE UNDERWATER COUNCIL, INC.

By CHARLES DUNN

At our May meeting we were honored to have Lt. Comdr. Jurkoic, MD, USN, as our guest speaker. Comdr. Jurkoic is attached to the Bayonne, New Jersey Navy Salvage School and is a specialist in the Physiology of diving. He presented two very informative and interesting films on diving. These films are used by the Navy for training purposes and needless to say we all profited from seeing them. We would have kept up our barrage of questions all night if the president hadn't come to the Commander's help by calling a halt. Our thanks and appreciation go to Commander Jurkoic.

The final date has been set for the Sectional Eliminations for the East Coast Spearfishing Championships. The eliminations will be held July seventh and the championships on July twenty-first. One out of every four teams entered in the eliminations will be eligible to enter the championships and there will be no additional fee for entry in the championships. The 1956 rules will be used with some minor changes. Some of the changes are as follows: eels will be considered as edible fish, any fish caught must be fourteen inches or over, the striped bass minimum will be twenty inches, each diver must be equipped with an inflatable self rescue devise, no stringers will be permitted, that is each diver must have a floatable container for the fish he has caught. All clubs organized three months prior to the date of the eliminations are eligible to enter the championships. Clubs do not have to be council members to participate but all members of the club team must hold AAU cards.

Several member clubs have been holding inter-club competitions and we all believe this is an excellent idea for all clubs to work on.

We have established three annual awards. A trophy will be given for the largest catch of the year, a second trophy will be awarded for the best photograph and last but not most important we plan an award for the diver doing the most as an individual to further the interests of our sport in safety, conservation and sportsmanship. »

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SKIN DIVER—July, 1957

MICHIGAN SKIN DIVING COUNCIL

By BEV SHAFT

This article is for the benefit of each and every skin diver in Michigan. As you all know, we of the Michigan Skin Diving Council have made attempts to get favorable legislation on spearfishing in Michigan. We are now at a standstill because we need the force of you behind us, before we can advance on to legislation.

Several people have approached our district representatives to sponsor a bill, to which they were agreeable, but nothing progressed. We have worked at this from different angles, but being so close to our problem we failed to see what the correct procedure should be. So we sat back and took a deep breath and—then the dawn! Who actually makes the laws? The people of course! Then why not appeal to them?

Has anyone in legislation ever said, "no we will not consider your case." The main cause of our delay is because our officials think that we skin divers are a scattered few throughout Michigan, therefore why not wait until there are enough enthusiasts to warrant passing a law. They of course are wrong in this thinking, but how will they know unless we inform them otherwise.

We know of approximately one thousand active skin divers representing twenty-six clubs in Michigan. We are sure there must be more clubs and many more active or potential skin divers in our Water Wonderland. Scattered among eleven thousand lakes they are few but together they are enough to get legislation.

So here is what we propose, and this will only be successful if each and every one cooperates. Send a letter, card or telegram to the Governor of Michigan asking for favorable legislation on spearfishing. We are all procrastinators at one time or another when it comes to letter writing, but please, this is URGENT!

May we suggest that the officers of each club be responsible for seeing

that every club member sends a letter to the Governor, but don't stop there. If you do not already belong to the Michigan Skin Diving Council, join today. Send your club name, roster, and constitution to Bev Shaft, 13804 Parkgrove, Detroit 5, Michigan. Those not belonging to a club, write and we will send you the address of the club in your area.

If everyone has a different idea of what we mean by favorable legislation then we are liable to defeat our own purpose. Here is a sample letter, which we ask you to use as a basis for your request.

Dear Governor Williams,

I am one of the many active skin divers in Michigan and am anxious to have favorable legislation on spearfishing, specifically spearing of rough fish (Carp, GarPike, Dog Fish, etc.) year around with a hand spear only.

Name—Address—Town—(The above is a must)

Send to: Governor G. Mennen Williams

State Capitol

Lansing, Michigan

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CLUB NEWS



Pages 50 through 55

Dayton, Ohio . . .

DAYTON Y SKIN DIVERS

By Tim Koverman

Diving in the Dayton area promises to be better this year than ever before. We now have our choice of more stone quarries to dive in. Last year we did most of our diving at the quarry in Cedarville, Ohio. This year we dive at Centerville, New Paris, and Silver Lake. The quarry at Cedarville, Ohio, located about 15 miles east of Dayton, is by far the best. It has a visibility of about 25 feet and a depth of from 18 to 35 feet.

There is only one problem. The charge for diving last year was \$1.50 a day. So far this year we have not been permitted to more than a few times. We are hoping that some day soon this quarry will be open to all divers at a reasonable cost.

The club has been active during the winter; ice diving, indoor practice, making a movie for T.V. and many other such activities. We would like any club within 200 miles, that knows of a good diving spot, to write us. c/o Tim Koverman, 4274 Cordell Dr., Dayton 9, Ohio.

Rockford, Illinois . . . GREATER ROCKFORD LUNG DIVERS, INC.

By Jack Egler

Diving meetings were held at the Wagon Wheel Lodge during the winter months for members and their families. Three members, Jack Egler, Ed Thorne and Art High, went to Marathon, Fla., this winter for some exciting diving.

On May 5 several of the members dived at Lake Woohesa in Wisconsin. Organization of the club was started in February, 1957, and it was officially incorporated April 16, 1957. Of our forty members, thirty are equipped with diving apparatus. Several activities are being planned by activities chairman, Ralph Lindbloom.

Rahway, N. J. . . .

MERMEN DIVING CLUB

By Lynn Hayes

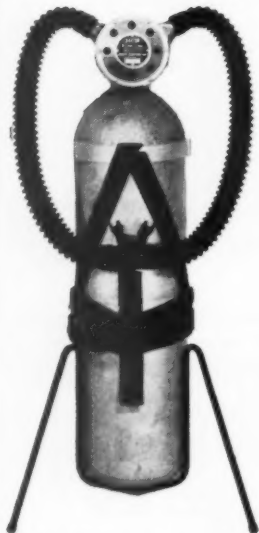
At our last meeting we had an assortment of short films including "Ten Fathoms Deep" and discussed having our first club outing of the year. We finally decided to go on May 30 and about twice a month from then on for the rest of the summer. We also decided that a trophy would be given for the biggest fish speared at each outing. The first outing came off very well and Les Reitman won the trophy with a three pound blackfish out of Sharkriver inlet. (The inlet was closed by the coastguard as of June 1 to skin diving.)

Our club is having trouble finding films or other forms of entertainment for our meetings, therefore we would like a very much if other clubs could give us some ideas and also tell us of any privately owned or privately made films we could borrow or rent. Any information should be sent to Lynn Hayes, 85 W. Milton Ave., Rahway, N. J.

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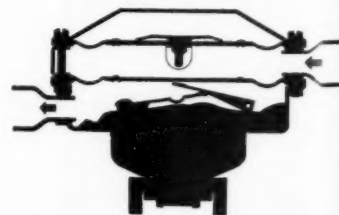
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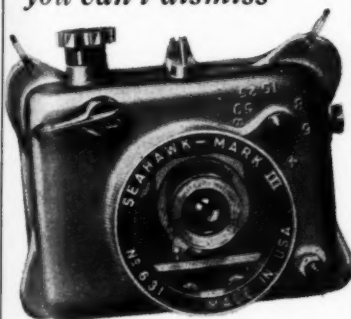
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Flint, Michigan . . .

FLINT SKIN DIVERS CLUB

By David Foster

At a recent club picnic and dive most of our time and air was spent looking for a 75-horse outboard motor. Because of the bottom covering (five feet of tangled weeds and four feet of slimy muck) the search was unsuccessful. The warm sunny day was perfect however, and all of the members had a fine time.

The design and color of our club emblem was changed at the latest meeting. The F.S.D.C. would like to wish good luck to Jo Hunter, who is going to have a little diver, and Bob Kyrolainer, entering the Army.

The club is planning another cruise this summer with Jim Sawtelle, a charter member who has developed the Great Lakes Charter Tours. The terrible fate of the majority of our members on last year's cruise is hoped to be avoided this year. The danger—poison ivy.

Hamilton, Ontario, Canada . . .

HAMILTON SUB-MARINERS

By Donald Fair

The Hamilton Sub-Mariners are sponsoring a Diving Meet to be held the weekend of August 30th to September 2nd (Labor Day). Come one come all. If you like good-clear-deep water you'll love this. We hope to make this a yearly event.

A special invitation to clubs in the Northern States and all clubs in Ontario. Meet to be held at BALA, Ontario. Hope to see you at the 100 ft. level. For further information contact: Donald Fair, 176 Sanford Ave. N., Hamilton, Ontario.

Portland, Oregon . . .

OREGON SKIN DIVERS

By Alan Beale

Three members of the Oregon Skin Divers came home Sunday, June 2 with the first place award from the Northwest Regional Spearfishing contest held at Port Townsend, Washington. Tom Amerman, Bob Holmes, and Dick Wald garnered 45 pounds of fish to wrap up the championship and bring it home to Portland with them. Second place went to the Puget Sound Mudsharks with a total catch of 42 pounds, 7 ounces. Third place went to the Port Townsend Pile Divers with a catch of 37 pounds. The largest weighing 17 pounds was caught by Duane Pérviance of the Port Townsend Pile Divers. A total of 15 teams entered the contest representing the following cities: Portland, Seattle, Tacoma, Spokane, and Port Townsend. The contest began at 12:00 noon and ended at 3:00 p.m. Sunday afternoon. I would like to extend my sincerest congratulations to these three fellows who were responsible for bringing home the "meat". (meet?)

Milwaukee, Wisconsin . . .

MIDWEST AMPHIBIAN CLUB

By Norbert Peplinski

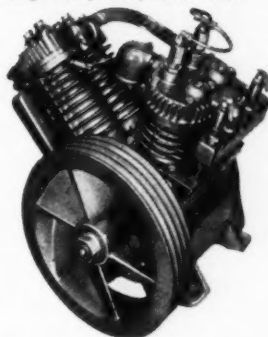
Summer is here! So it says here. Brrrr. After a long winter hibernation by some of our fair weather divers we had a very good turn out at our last two club dives.

Our club has started its summer membership drive this month. Last meeting we voted to purchase a boat suitable for diving. A photo contest has been set up with prizes for pics above as well as below the water. Color or black and white, and prizes will be given out at our July meeting.

Last Sunday a skin diver drowned in Lake Geneva. The water was only 15' deep and he was 50' from shore. He was from Springfield, Illinois. Upon checking with the survivor we found that both had been drinking heavily before diving and the victim was subject to heart attacks. The double tank unit was working when recovered and had an ample supply of air.

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Lexington, Kentucky . . .

MERMEN OF KENTUCKY

By Estill Lyon

Twelve new members have been accepted into our group, they are: Douglas Ahrens, Robert Amster, Jack Amster, A. E. Combs, Carl Dingus, Robert Gillespie, Robert Ham, Dexter Marsh, Thomas Ray Reeves, Garry Trimble, Bobby Trimble and Tommy Rapborne.

This season we are going to try something different, instead of trying to have all our members go on trips together, we are going to encourage that only two or three members go and take their wives, families or friends.

Not everyone likes to dive, we intend to have water skiing, boating, picnics and just swimming on each outing. ➤

Chicago, Illinois . . .

WEST SUBURBAN FATHOM MASTERS

By Lillian Bogach

Our club has an active membership of 26 men and women, single and married. Our meetings are held twice a month, with an hourly discussion followed by a pool dive at the Oak Park Y.M.C.A. During the winter we play water hockey, practice with spearguns, and keep in trim for our summer outings held at the local lakes and quarries. Recently Al Hallowell, our president, and Jack Hall retrieved a cash register from the Des Plaines River. Air temperature was 36, water temperature was 38.

During Memorial Day weekend we constructed a pier for the Y Camp to help pay for our accommodations. ➤

Salt Lake City, Utah . . .

SALT LAKE SKIN DIVING CLUB

Last month the American Red Cross played host to the Salt Lake divers. Water safety films were featured with an interesting lecture by the water safety director. He expressed the growing interest the Red Cross has in scuba swimming since so many persons are turning to this activity. Other movies of the clubs outings at Bear Lake and Timpy Springs were shown.

The welcome warm weather has given the club a shot in the arm. Everyone is clamoring to get into the water. Most of the club members have already been diving at Timpy Springs.

We've talked of a club sponsored diving trip to California in mid-summer. We would like to dive with another club from Calif. We'll welcome any invitations from other clubs to show us "out of towners" around the diving circles. Please drop us a line. 368 Beta #4, Salt Lake City, Utah. ➤

Los Angeles, California . . .

AQUA DEVILS

By Fred Giral

Our recent club dive at Punta Banda was quite eventful. To start the ball off right, our caravan of four loaded cars took the wrong road and ended up 50 miles beyond Punta Banda in the desert of Mexico. We no sooner discovered our mistake and turned around when our President and two club photographers turned their Volkswagen over four times (end over end). The two photographers came out of the car and the President stayed in. Miraculously no one was even scratched. Before reaching our destination another member smashed one side of his car. After walking a mile and a half (almost straight down) we arrived at a beautiful cove and enjoyed a week-end of good diving.

We are hoping that our next dive at Catalina will not be as costly.

We will start reviewing all phases of first aid, scuba diving, and skin diving as soon as our Safety Director finishes his training with the Los Angeles County Dept. of Parks and Recreation. ➤

Westchester, N. Y. . . .

WESTCHESTER TRITONS

By Walter Ellefsen

Our club has been active all winter including several winter dives.

We are in the process of expanding our membership somewhat and would like to hear from interested divers. One of our recent dives was into the Tilly Foster Quarry near Brewster, N. Y. which was once a successful magnetite mine.

Surface temperature was 65 in late May; visibility was 35 feet. Al Weisbecker followed a ladder down into the eerie depths to 85 feet but gave up any deeper exploration due to the extreme cold. »

Stoneham, Mass. . . .

BAY STATE AQUA CLUB

By Gerald Comeau

The newly elected officers for the 1957 to 1958 season are: Wayne Comeau, President; Jerry Comeau, Secretary; Eldon Livingston, Treasurer and John Silva, Business Representative. Past President Fred Messina left for active duty with the U.S. Air Force on May 13th.

We have a busy schedule planned for this summer. Besides our 18 regularly scheduled diving meets, we are also planning theater displays, an Open House, and most important, a Skin Diver's Training Program.

This training program is not designed to make expert frogmen out of beginners, but is designed to impart a fuller understanding of the sport, and the most basic procedures and safety factors to these beginners. In our theater displays we are including a setup of equipment that is prohibited by this club for use in skin diving due to a lack of the maximum safety features.

Anyone interested in our Training Program, or our Open House Display, we can be contacted at 6 Minot Street, Stoneham, Mass. »

Tacoma, Washington . . .

TACOMA SCUBANEERS

By Hank Lamont

The Tacoma Scubaneers, Tacoma, Washington are starting off the summer with new officers and a new clubroom. New officers are: Mike Sorber, Dave Curtis, Sam Raymond and Bruce Smart.

A large room was given to the club by Market Marina. With all members participating we turned the place into a diver's room. The walls now sport everything from maps to starfish.

We took part in a water safety show at the College of Puget Sound and received some very good publicity demonstrating different types of equipment and their usage.

Our future plans include a 3-day dive in San Juan Islands as well as weekend dives in the Puget Sound area.

We would like to hear from other clubs. Our address is: Market Marina, 618 St. Helena Avenue, Tacoma, Washington. »

Spokane, Washington . . .

SPOKANE SKIN DIVERS CLUB

By Dale Pratt

Water Temp., 60°; Water condition, Good; Air Temp., 75°.

The Spokane Skin Divers Club was organized two years ago and skin diving has been growing very rapidly in the Spokane area since then. All of our club's diving is done in the many clear lakes in this area. Most of the organized diving is done with lungs. Although the spearing of game fish is prohibited in Washington, the spearfishermen of this area, have plenty of scrap fish available.

Acknowledgements for promoting safety in skin diving for this area should be made to: David Woodward, past secretary of the club, Clyde Combs, Water Safety instructor for the American Red Cross, and Gerald Bundy, President of the Spokane Skin Divers. »

Wayne, Michigan . . .

WAYNE AQUA-MEN

By Jess Maxwell

The Wayne Aqua-Men, Michigan's leading skin diving club, now has in its possession a 30-foot former racing boat. The craft, which weighs nearly two tons, was donated to the skin diving group by George Zigas in Detroit, who manufactures marine engines. The boat was known in Gold Cup racing circles as the "Thunderbolt," and reached speeds of 130 miles per hour.

The Aqua-Men intend to dock the boat in Lake Erie to use in diving and salvage operations. The craft will be redesigned and modernized to hold all skin diving equipment and will be equipped to take twenty divers to locations with facilities for air on board. »

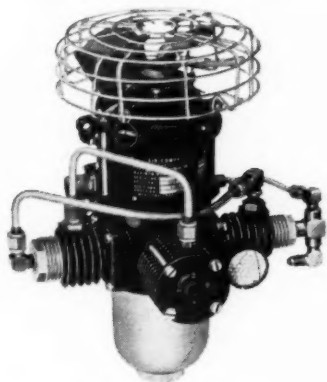
Long Beach, California . . .

SUBAQUAS

By Jay Fletcher

Dave Jacobson and Larry Rice swept top honors at the April 28th beach meet held at Crystal Cove, with an array of Calico bass and Opaleye. The water was quite murky, which made deep diving impractical. The boys bagged most of their fish in the 20 to 30 foot levels. The next Subaqua beach meet was held at Salt Creek, May 19th.

The club would like to extend an invitation to all married men, interested in diving with a club made up of married men, to bring your wife (and children) to our beach meets and to our next regular meeting. Second Thursday of every month, 8:00 P.M., Leland Stanford Jr. High School, Gym Bldg., 5871 Los Arcos, located a few blocks east of Willow and Bellflower Blvd., Los Altos, California. For further information call our club president Larry Rice, MEtcaif 3-2573, 7847 Harrison St., Paramount, Calif. »



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Norwalk, California . . .

AQUA-KNIGHTS

By Bob Gibson

This is our first report to "Skin Diver." Our club is about a year old and consists of 15 divers, ranging anywhere from 15 to 17 years old. We have been diving around Corona Del Mar, Palos Verdes, and Malibu. We are doing fairly well, with Malibu turning out the best. During Easter vacation we

stayed down at Corona Del Mar a few days but the diving was poor because of the murky water.

We are planning to make our first trip to Catalina next month and are getting our club jackets in a couple of weeks. If there are any divers interested in joining our club in the Norwalk, Bellflower, Whittier and Downey area phone or write Bob Gibson, 12825 Fairfield, UN 3-8485, or Larry McKown, 12622 Fairfield, UN 3-8940.

New York, N. Y. . . .

"AQUA ACES"

By Bill Astwood

Water Temp., 60°; Visibility, 12 ft.; Air Temp., in 80's.

April and May dives of the "Aqua Aces" were mostly confined to club trips to Atlantic Beach. The trips were routine except for the sighting of vast numbers of Horseshoe Crab and a few grimly humorous neophytes, who upon staggering down to the waters edge, under a storeload of new equipment, straighten up and stand there waiting for the sighs of rapture from the girls, I guess. They then proceed to put on all their junk and end up looking like that prophetic man from Mars and without a single word of instruction from anyone, walk into the water and almost drown. Although this is all very amusing to watch, these are the people who give diving a bad name. Unfortunately, there are not enough places where anyone interested in diving can get a good education on how to use his equipment.

This coming month brings the real beginning of the summer and diving now really starts in earnest. Our club as a whole will begin to ease off and our meetings are cut down to once a month. One of our new members is an ex-professional diver and we look forward to some possible salvage work. With two members interested in photography, we hope to garner enough pictures and material to send in to the "Skin Diver" as a possible future article.

Atlanta, Georgia . . .

ATLANTA SKIN DIVERS CLUB

By Aliene F. Allen

Our Club is now one of the many official clubs coming under the jurisdiction of the Georgia State Skin Divers Association and the Amateur Athletic Union.

We have been diving at least once a week in some very fine quarries, lakes, and the Gulf of Mexico. Many new members have joined our ranks through the general public skin diving classes held at the Y.M.C.A. Underwater motion pictures, technical lectures, scuba excursions, and a monthly social get-together have attributed to our success in keeping up the interest of our members.

We have joined with the A.A.U., Southeast clubs and associations in campaigning for favorable spearfishing laws in the state of Florida, which does in every respect affect, in one way or another, all skin divers in the nation.

Ten to twelve of our club members spent a week of skin diving in the Bahama Islands aboard Jordan Klein's 80 foot "MAKO."

A group of American investors have obtained the services of John A. Liles and Dr. Lafayette Barrett to assist and supervise the salvage of an ancient wreck recently located in the Abaco Island chain.



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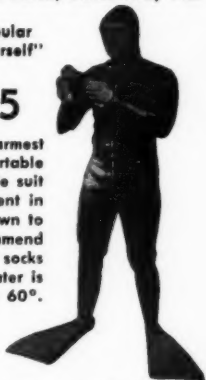
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Flint, Michigan . . . CUADRO PESCADORES

By Bette Nixon

The Cuadro Pescadores opened the spearfishing season by holding a spearfishing contest May 5, 1957 at Byram Lake, Linden, Michigan.

Forty-five divers representing all parts of Michigan were registered and many other divers and their families were present as spectators. Most of the divers and their families brought their own picnic lunches, affording a good time for every member of the family.

A good time was had by all I'm sure, in spite of the fact that few fish were taken as a result of being restricted by the Michigan Conservation Dept. to the use of hand spears only.

The first fish of the day was taken by Floyd Anibal of the Flint Finmen. Floyd's fish was a carp that weighed in at four pounds twelve ounces. The second fish, another carp and the winner, was taken by Pete Sisoy of the Dolphin Divers of Detroit. It weighed in at nineteen pounds, one ounce.

At half time of the contest most of the divers were taken to the west end of Byram Lake where it was reported by Conservation officers Harold Stoll and Ivan Keston that the carp were congregated. Although many large carp were seen in this area it was reported almost impossible to spear them with hand propelled spears.

Several of the divers told of hitting carp but were unable to pierce the tough hide far enough to engage the barbs on their spears. Truman Schrag, of the Fined Spartans of East Lansing retrieved some good sized fish scales but that is all.

When all divers were out of the water and dressed trophies and prizes were awarded. The First Place Trophy was awarded to the Dolphin Divers of Detroit. Members of the team were, Pete Sisoy, Bob Wisner, and Dave Mean, each receiving a team member trophy. The Second Place Team Trophy was awarded to the Flint Finmen, with team trophies going to Floyd Anibal, Roger Gatlin, and Wayne Dean.

As there was an abundance of wonderful prizes and few fish the remaining prizes were given away by a drawing.

Clubs present at the contest were: The Aquaneers of Flint, Ann Arbor Amphibians, Die Krebse of Flint, Aqua Addicts of Flint, Flint Skin Divers, Fined Spartans of East Lansing, Wayne Aqua-men of Wayne, Ford Seashores of Dearborn, and the Dolphin Divers of Detroit. The Cuadro Pescadores team consisted of Bob Berk, Wm. Armitage and Vern Secrist.

Compton, California . . . SEA ANGELS

By John C. Mills

The members of this club have found out what to do with their old club jackets, we use them to make club flags and insignias of different types.

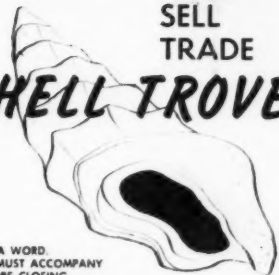
On our last club dive to Catalina island, one of our better divers was enjoying a free trip. He came up with the largest fish again and needless to say won the prize of another free trip, to Catalina, this member in name is Claude Long.

On Memorial Day we got together with three other clubs and had an inter-club competitive meet at "Arch Rock," near Corona Del Mar. The divers and their families had a good time, and the team standings at the end of a four hour period were as follows: Southern California Dolphins; Cormorants, Sea Angels and Aqua Devils.

We would like to hear from more of the local clubs for more competitive meets. For more information call either Luther (Mac) McCulloch, at Lawrence 2-4563, or Dick Homesly at Newmark 8-2753.

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WANT TO CORRESPOND with divers abroad about pearl diving. John Root, 724 Palm St., West Palm Beach, Florida.

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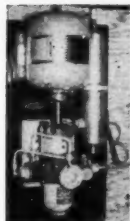


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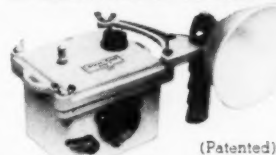
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